

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
(PACKAGE) HPV DNA PCR High Risk typing 16/18 plus Genotype(COBAS HPV)	M337	7 days (In case of other high risk HPV detected, the HPV result will be reported on Friday 5 pm)	Real-time PCR (Taqman probe) for 14 HR-HPV Real-time PCR (DPO and TOCE) for HPV28 subtypes (Only 12 Other HR positive)		Cervical specimens collected in cobas® PCR Cell Collection Media, PreservCyt or SurePath. (minimum 5 mL)	Collected in cobas® PCR Cell Collection Media and PreservCyt may be stored at 2-30°C for up to 6 months. Collected in SurePath Preservative Fluid may be stored at 2-8°C for up to 4	1,300	In Lab	
(PACKAGE) HPV DNA PCR High Risk typing 16/18(COBAS HPV)	M338	5 days	Real-time PCR (Taqman probe) for 14 HR-HPV (Subtyping available only 16 and 18)		Cervical specimens collected in cobas® PCR Cell Collection Media, PreservCyt or SurePath. (minimum 5 mL)	Collected in cobas® PCR Cell Collection Media and PreservCyt may be stored at 2-30°C for up to 6 months. Collected in SurePath Preservative Fluid may be stored at 2-8°C for up to 4	890	In Lab	/
(PACKAGE) HPV High Risk mRNA Test(APTIMA HPV)	M329	8 days	Transcription-Mediated Amplification (TMA) and Hybridization Protection Assay(HPA) for HPV E6/E7 mRNA		Cervical specimens collected in PreservCyt Solution (minimum 5 mL)	2-30°C for up to 30 days	730	In Lab	/
1,3-Butadiene (DHBMA) in Urine (LC-MS/MS)	S077	within 12 days(except checkup group)	Liquid Chromatography and Tandem Mass Spectrometry (LC-MS/MS)	0.000 - 2.500 mg/L (ACGIH2020)	Random Urine 10-20 mL (End of Shift)	Store & Transport at 2-8°C	2,500	In Lab	/
1,3-Butadiene [Reference toxic]	V018	ไม่รับประกัน TAT	LC-MS	<2.5 mg/L	Urine 20 ml (minimum 10 ml)** ต้องส่งเป็น tube ยกเลิกการส่งเป็นกระป๋อง**	2-8 °C	2,500	Out Lab	
17-Hydroxyprogesterone (LC-MS/MS)	S195	Within 10 days	Liquid chromatography tandem mass spectrometry (LC-MS/MS)	As the attached file in Example Lab Report	Serum 1 mL	Store & transport at 2-8 °C	1,700	In Lab	
17-OH Progesterone (Chula)	N350	11 days	RIA		serum 1 ml	2-8 °C	1,800	Out Lab	
1p/19q Deletion (FISH) (Chula)	MM983	20 days	Fluorescence In Situ Hybridization (FISH)		1. H&E slide 1 slide+ Pathology report+Unstain slide 4 slide (Not send Tissue Block) 2. ใช้ใบ request เหมือน HER2 FISH แต่ต้องเขียน 1p/19q Deletion (FISH) เพิ่มลงในใบรีเควส	Room temperature	23,500	Out Lab	
2,5 Hexanedione in Urine(HS-GC-MS)	S021	within 9 days (except checkup group)	GC-MS	0.00-0.50 mg/L (ACGIH2020)	Random Urine 5-10 mL(End of shift)	Store at 2-8 °C	500	In Lab	/
2,5 hexanedione[Reference toxic]	V206	35 Days	GC	= < 5 mg/g creatinine	Urine 20 ml. minimum 5 ml (staff of reference : 8/916)	2-8 °C	600	Out Lab	
21-Hydroxylase Deficiency (deletion/duplication analysis of CYP21A2 gene)(CGC genetics)	M701	22 days	MLPA(multiple ligation-dependent probe amplification)		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	18,700	Out Lab	
21-Hydroxylase Deficiency (frequent mutations and del/dup analysis of CYP21A2 gene)(CGC genetics)	M629	30 Days	Targeted variant analysis		EDTA whole blood 3 ml	Room temp. (20-25 °C)	24,000	Out Lab	
21-Hydroxylase Deficiency (sequence analysis of CYP21A2 gene)(CGC genetics)	M630	35 Days	Sequence analysis of the entire coding region		EDTA whole blood 3 ml	Room temp. (20-25 °C)	31,000	Out Lab	
24 chromosomes aneuploidy screening by NGS(10th embryo)(BML)	MM110	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6 : Embryo ตัวที่ 10	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(11th embryo)(BML)	MM111	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 11	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(12th embryo)(BML)	MM112	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6 : Embryo ตัวที่ 12	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(13th embryo)(BML)	MM113	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6 : Embryo ตัวที่ 13	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	

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24 chromosomes aneuploidy screening by NGS(14th embryo)(BML)	MM114	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6 : Embryo ตัวที่ 14	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(15th embryo)(BML)	MM115	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6 : Embryo ตัวที่ 15	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(1st embryo)(BML)	MM101	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 1	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(2nd embryo)(BML)	MM102	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่2	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(3rd embryo)(BML)	MM103	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 3	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(4th embryo)(BML)	MM104	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 4	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(5th embryo)(BML)	MM105	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่5	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(6th embryo)(BML)	MM106	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 6	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(7th embryo)(BML)	MM107	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 7	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(8th embryo)(BML)	MM108	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6: Embryo ตัวที่ 8	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
24 chromosomes aneuploidy screening by NGS(9th embryo)(BML)	MM109	4 Days	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6:Embryo ตัวที่ 9	Biopsy sample should be freeze and store at -20C.	12,000	In Lab	
2-Thiothiazolidine-4-Carboxylic Acid, TTCA [Special Lab Center]	V131	35 Days			Random Urine >20 mL (end of shift)	2-8 °C	280	Out Lab	
3-Methoxytyramine, Urine-HPLC (24-h Urine)	S219	within 10 days	HPLC	Male/Female : 18-40 years 0.00-459.8 µg/24h 40-60 years 0.00-426.4 µg/24h >60 years 0.00-384.6 µg/24h	24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volumn.	Store at 2-8 °C .	2,480	In Lab	/
5-HIAA(Chula)	N324	11 days	HPLC	0.7 - 8.2 mg/24 hr.	24 Hr Urine (preserved by 30 ml of 6N HCl) 50 ml , minimum volume 10 ml, protect from light	2-8 °C	750	Out Lab	
5-Hydroxyindoleacetic Acid (5-HIAA), Urine-HPLC (24-h Urine)	S204	within 10 days	HPLC	2.00-8.00 mg/24h urine	24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volumn.	Store at 2-8 °C .	2,850	In Lab	/
5-panel MSI Markers (BAT25,BAT26,D2S123,D5S346 and D17S250) [BML]	M007	10 days	PCR and fragment analysis of microsatellite markers (BAT25,BAT26,D2S123,D5S346 and D17S250)		1. FFPE with tumor + 3-5 ml EDTA blood + Pathology report (Preferred) 2. FFPE with tumor + FFPE without tumor + Pathology report (Alternated)	1. FFPE keeps at room temperature for 3 years 2. EDTA blood keeps at 2-8°C for 1 month	6,000	In Lab	
5-Panel MSI markers (Chula GenePro)	M771	18 days	Real-time PCR detection of seven biomarkers including ACVR2A, BTDB7, D1D01, MRE11, RYR3, SEC31A and SULF2.		EDTA whole blood 3 ml (2 tubes) and Tissue in paraffin block + H&E slide + Pathology report	room temp	12,600	Out Lab	
8-Hydroxy-2'-deoxyguanosine (8-OHdG) in Urine (LC-MS/MS)	S902	within 10 days	Liquid chromatography tandem mass spectrometry (LC-MS/MS)	Female: 0.54-3.11 nmol/mmol Male : 0.45-2.22 nmol/mmol	First morning urine, 10-20 mL	Store at 2-8 °C .	8,000	In Lab	
AA/EPA (Essential Fatty Acids)(Biostem)	C674	23 days	N/A		a) blood sample collected in an EDTA (purple) vacutainer tube or b) blood spot sample. A blood spot is collected by using a lancet to pierce the skin on the end of a finger. Spots of blood are allowed to drop onto an absorbent test card (filling three spots) and allowed to dry.	2-8 °C	5,500	Out Lab	

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Ab screening	L040	1 day	column agglutination		EDTA blood 6 ml and serum 3 ml	เจาะแล้วส่งทันที 2-8 C ไม่เกิน 24 hr.	500	In Lab	/
ABO Group for hematology	A020	1 day	1. ABO Direct grouping (Cell grouping) เป็นการตรวจหาแอนติเจน A และ/หรือ B โดยใช้เซลล์เม็ดเลือดแดงทำปฏิกิริยากับน้ำยา Anti-A, Anti-B และ Anti-A,B วิธี Test tube technique 2. ABO serum grouping เป็นการหาชนิดแอนติบอดี Anti-A และ Anti-B ในซีรัม โดยใช้ Test tube technique		EDTA Blood or Clotted blood	2-8 °C	50	In Lab	/
Acanthamoeba Culture	D535	9 days	culture in NNE medium -->If the organism growth ,due to microscopic examination	no growth	corneal swab	room temp	730	Out Lab	
Acetone (Urine) (Rama)	V760	6 days	GC-Headspace		random urine 50 ml	2-8 °C	600	Out Lab	
Acetone in Urine (HS-GC-MS)	S032	within 5 days(checkup group maybe longer)	GC-MS	0.0 - 25.0 mg/L (ACGIH2020)	Random Urine 5-10 mL.(End of shift)	Store at 2-8 °C	400	In Lab	/
Acetyl cholinesterase	T060	7 days	ph meter	1.0-1.5 (ไม่มีหน่วย)	EDTA whole blood 3 ml	2-8 °C	550	Out Lab	
Acetylcholine receptor antibody	T270	7 days	ELISA	Negative < 0.4 nmol/L Borderline >= 0.40 to < 0.50 nmol/L Positive >= 0.50 nmol/L	serum 1 ml	2-8 °C	2,600	In Lab	
Acetylcholine receptor antibody (BRIA)	T271	42 Days	RIA		serum 2 ml	2-8oC	5,250	Out Lab	
Acid alpha-glucosidase enzyme activity (Duke University Medical Center)	C785	30 Days	-	-	EDTA whole blood 3-5 ml	2-8 °C , stability 48 hours	17,685	Out Lab	
Acid Phosphatase (Sperm)	B018	21 days	screening and microscopy		Vaginal swab and Slide (all types of samples assumed to be semen and/or direct smear on glass slide)	swab --> Freeze slide --> 2-8 °C	980	Out Lab	
Acid Phosphatase with tartrate resistance (Rama)	A762	9 days	Cytochemical stain		EDTA peripheral blood 5 ml and 3 unfix smear slide or Heparinized bone marrow 5 ml and 3 unfix smear slide	room temp	600	Out Lab	
ACT BRCA (ACT Genomics)	MM986	21 days	Next Generation Sequencing (NGS)		Please provide one of the tumor tissue type (1 of 3) and also provide normal tissue for germ line mutation tests (Send both FFPE and Blood if available) FFPE: 1. Surgical => 5 unstain slides (10 um/slide) + 1 H&E slide 2. Core Needle Biopsies => 6 unstain slides (10 um/slide) + 1 H&E slide 3. DNA > 200 ng Normal: 1. Whole blood 8 ml blood in Streck tube (Deliver within 4 days)	Room temperature	100,850	Out Lab	
ACTDrug Plus (ACT Genomics)	MM600	21 days	Next Generation Sequencing (NGS)		Please provide one of the tumor tissue type (1 of 5) FFPE: 1. Surgical => 10 unstained slides (หนาสไลด์ละ 10 um) + 1 H&E slide 2. Core Needle Biopsies => 10 unstained slides (หนาสไลด์ละ 10 um) + 1 H&E slide 3. DNA > 200 ng 4. Pleural Effusion => Cell block + 1 H&E slide 5. Ascites => Cell block + 1 H&E slide ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Room temperature	155,250	Out Lab	

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ACTImmune (ACT Genomics)	MM980	45 Days	NGS-based whole exon sequencing (>18,000 genes) HLA classI Microsatellite instability		Please provide one of the tumor tissue type (1 of 5) AND WITH whole blood 8 ml blood in Streck tube (Deliver within 4 days) FFPE: 1. Surgical => 5 unstain slides + 1 H&E slide 2. Core Needle Biopsies => 6 unstain slides + 1 H&E slide 3. DNA > 200 ng 4. Pleural Effusion => Cell block + 1 H&E slide 5. Ascites => Cell block + 1 H&E slide	Room temperature	408,600	Out Lab	
Activated Protein C resistant Assay (Chula)	K275	11 days	APTT-based		Na Citrate plasma 2 ml	Freeze	640	Out Lab	
ACTMonitor (Lung, Breast and Colon) (ACT Genomics)	MM981	21 Days	Next Generation Sequencing (NGS)		Whole Blood ในชุดเก็บ ACT Genomics เท่านั้น 1. ส่งโดยใช้ชุดเก็บของ ACT Genomics เท่านั้น 2. แพทย์+คนไข้ สามารถเขียนใบ Request + Consent form ระหว่างรอชุดตรวจได้ โดยไหลดใบ Request + Consent form จาก Salesforce 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Storage at Room temperatures and must send to BML in 4 days	55,000	Out Lab	
ACTMonitor Plus (50 genes)(ACT Genomics)	MM982	21 Days	Next Generation Sequencing (NGS)		Whole Blood ในชุดเก็บ ACT Genomics เท่านั้น 1. ส่งโดยใช้ชุดเก็บของ ACT Genomics เท่านั้น 2. แพทย์+คนไข้ สามารถเขียนใบ Request + Consent form ระหว่างรอชุดตรวจได้ โดยไหลดใบ Request + Consent form จาก Salesforce 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Storage at Room temperatures and must send to BML in 4 days	103,120	Out Lab	
ACTOnco Plus (ACT Genomics)	MM601	21 days	Next Generation Sequencing (NGS)		Please provide one of the tumor tissue type (1 of 5) FFPE: 1. Surgical => 10 unstain slides (หน้าสไลด์ละ 10 ไมครอน) + 1 H&E slide 2. Core Needle Biopsies => 10 unstain slides (หน้าสไลด์ละ 10 ไมครอน) + 1 H&E slide 3. DNA > 200 ng 4. Pleural effusion => Cell block + 1 H&E slide 5. Ascites => Cell block + 1 H&E slide ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Room temperature	214,250	Out Lab	
Acute Myeloid Leukemia (AML sequence analysis of exons 8, 10, 11 and 17 of c-KIT gene)(CGC genetics)	M631	37 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	18,000	Out Lab	
ADAMTS 13 (Chula)	K370	16 days	ELISA		Na Citrate plasma 1 ml x 2 tubes	Freeze	3,750	Out Lab	
ADAMTS 13 Antibody (Chula)	K191	16 days	ELISA (KIT)		Na Citrate plasma 1 ml x 2 tubes	Freeze	5,000	Out Lab	
Adenosine Deaminase	N247	4 days	Colorimetric	serum 0-18 U/L Body fluid (ยกเว้น CSF) 0-33 U/L CSF 0-11.4 U/L	serum or CSF or body fluid 1 ml	2-8°C	600	In Lab	
Adenosine Deaminase Deficiency (sequence analysis of ADA gene)(CGC genetics)	M632	67 Days	Sanger		EDTA whole blood 3 ml	Room temp. (20-25 °C)	36,000	Out Lab	
Adenovirus antibody IgG(RAMA)	N799	9 days	ELISA	2-200 RU/mL	serum 1 ml or Clotted blood 5 ml	2-8 °C	600	Out Lab	
Adenovirus Antigen screening	P845	1 day	immunochromatography		Nasopharyngeal Aspirate or Throat swab in sterile container	2-8 °C	500	In Lab	
Adenovirus IgM (DOMC)	P797	16 days	ELISA		serum 1 ml (minimum 0.5 ml)	2-8 °C	870	Out Lab	
Adenovirus Isolation(Chula)	H128	15 days	Cell culture and direct fluorescent stain		Nasopharyngeal, Nasal wash or swab, Bronchial wash or lavage in transportation media (unacceptable sputum, urine or stool)	2-8 °C	1,375	Out Lab	
Adenovirus PCR (Blood)[Rama]	H126	5 days	Real time PCR		EDTA plasma 2 ml	EDTA plasma 2 ml	1,960	Out Lab	

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Adenovirus PCR (Fluid)[Rama]	H123	5 days	Real time PCR		urine , CSF, Nasopharyngeal aspirate, body fluid 500 ul	Freeze	2,000	Out Lab	
Adenovirus PCR Multiplex [Chula]	H127	7 days	PCR multiplex	-	CSF , urine 2 ml , or throat swab in sterile container	2-8 °C	2,530	Out Lab	
Adenovirus Viral Load (Blood) [Rama]	H125	4 days	Real time PCR		EDTA plasma 2 ml	Frozen	2,300	Out Lab	
Adenovirus Viral Load (Fluid)[Rama]	H124	4 days	Real time PCR		urine , CSF, Nasopharyngeal aspirate, body fluid 500 ul	Frozen	2,500	Out Lab	
ADHD sensor & 6 Sensor of DNA nutri control (Rapport/Genosense)	B612	35 days	SNPs		Buccal swab in special kit	Room Temp.	47,950	Out Lab	
ADHD sensor (Rapport/Genosense)	B611	35 days	SNPs		Buccal swab in special kit	Room Temp.	15,540	Out Lab	
Adiponectin (Biovis 359)	C687	16 days	N/A	-	serum x 2	frozen	6,200	Out Lab	
Adiponectin (Wincell)	C802	9 days	ELISA	Male 1.8-5.0 ug/mL Female 2.8-7.0 ug/mL	Serum 3 mL	Freeze	6,500	Out Lab	
ADMA (Biovis 554)	C688	16 days	Competitive enzyme linked immunoassay	umol/L	Serum 2 tubes (3 mL/tube)	frozen(-20°C) >1 week	8,900	Out Lab	
Adrenocortex Stress Profile (Saliva) [ADL]	N798	23 days			saliva 5 ml in collecting kit (4 tube)	2-8 °C, do not freeze	5,630	Out Lab	
Adrenocortex Stress Profile (Thai cell Fix)	C862	17 days			Collect saliva during the specified time frame. 4 tubes in saliva collection tubes	Frozen saliva	11,220	Out Lab	
Adrenocorticotrophic Hormone (ACTH)	N760	7 days	Chemiluminescence immunoassay (CLIA)	4.7 - 48.8 pg/mL	EDTA plasma 1 ml	-20°C or below stability 30 days	870	In Lab	/
Adrenoleukodystrophy, ALD [Siriraj]	B065	60 days	polymerase chain reaction (PCR) ตามด้วย direct DNA sequencing		EDTA whole blood 5 - 10 ml.	2-8 °C	6,250	Out Lab	
Advanced β-globin ARMS-PCR (25 mutations) (ATGenes)	M984	16 days	ARMS-PCR		3-6 mL EDTA blood	2-8 °C	2,800	Out Lab	
AFB Stain	E230	1 day	Kinyoun Method and Microscopic Examination		Sputum ,All Sterile specimen	2-8oC	65	In Lab	/
Albumin	C630	1 day	Bromocresol Green	ผู้ใหญ่ 3.4 - 4.8 g/dl ; เด็กแรกเกิด 0 - 4 วัน 2.8 - 4.4 g/dl ; เด็ก 4 วัน - 14 ปี 3.8 - 5.4 g/dl ; 14 - 18 ปี 3.2 - 4.5 g/dl	serum 1 ml	2-8 °C	60	In Lab	/
ALCAT 100 (Thai100)(HMC)	J365	5 days	The impedance method of blood cell counting and sizing. (ROBOCat II)		3.2% Sodium citrate whole blood (tube3.0 ml x 5 tubes)	Room temp. Stability 24 hrs.	9,800	Out Lab	
ALCAT 180(HMC)	J367	5 days	The impedance method of blood cell counting and sizing. (ROBOCat II)		3.2% Sodium citrate whole blood (tube3.0 ml x 5 tubes)	Room temp. Stability 24 hrs.	17,590	Out Lab	
ALCAT 200 (HMC)	J362	5 days	The impedance method of blood cell counting and sizing. (ROBOCat II)		3.2% Sodium citrate whole blood (tube3.0 ml x 5 tubes)	Room temp. Stability 24 hrs	19,500	Out Lab	
ALCAT 250 (HMC)	J363	5 days	The impedance method of blood cell counting and sizing. (ROBOCat II)		3.2% Sodium citrate whole blood (tube3.0 ml x 5 tubes)	Room temp. Stability 24 hrs.	24,340	Out Lab	
ALCAT CHEM30(HMC)	J364	5 days	The impedance method of blood cell counting and sizing. (ROBOCat II)		3.2% Sodium citrate whole blood (tube3.0 ml x 5 tubes)	Room temp. Stability 24 hrs.	5,845	Out Lab	
Alcohol (Ethanol) (Fluid)(Rama)	V494	6 days	GC-Headspace	Not Detected, <10.0 mg/dL	CSF, Gastric, Eye fluid ,1 ml	2-8 °C	640	Out Lab	
Alcohol (Ethanol) in Blood (HS-GC-MS)	S025	within 3 days (except checkup group)	GC-MS	Legal limitation : less than 50 mg%. Medical limitation: less than 150 mg%. Critical report : more than 400 mg%.	NaF whole blood 2 mL.	Store at 2-8 °C	400	In Lab	/
Alcohol (Ethanol) in Urine (HS-GC-MS)	S024	within 5 days(except checkup group)	GC-MS	less than 50 mg%	Random Urine 10-20 mL.	Store at 2-8 °C Parafilm seal	400	In Lab	
Aldolase (ALD)(Siriraj)	C977	11 days	Kinetic assay		EDTA whole blood 3 mL	2-8 oC , stability 24 hours	2,200	Out Lab	
Aldolase [Rama]	C505	5 days	Enzymatic end point		serum 1 ml	Frozen	810	Out Lab	
Aldosterone (Blood)	C783	7 days	Instrument by LIAISON Analyser	Seated position 25.2 -392 pg/ml Recumbent 17.6 -232 pg/ml	Serum 1 ml	2-8 C stability 5 days - 20 C stability 30 Days	1,800	In Lab	/
Aldosterone (Blood) [Chula]	C820	No Defined TAT	RIA	(Supine = 1.0-16.0 ng/dl) (Erect = 4.0-31.0 ng/dl)	Heparinized plasma 2 ml or serum 2 ml	Frozen	870	Out Lab	
Aldosterone (urine 24hr) (รามร)	C821	16 days	ELISA	Reference range (5-19 ug/24hr)	urine 24 hrs 30 ml (no preservative)	2 - 8 oC	1,800	Out Lab	
Aldosterone/Renin,direct ratio	C777	7 days	Instrument by LIAISON Analyser		Serum 1 ml และ EDTA plasma 1 ml	EDTA plasm(Frozen) Serum(2-8oC)	3,000	In Lab	
Alexander Disease (LMGG)	MM522	1 month	Next-Generation sequencing		EDTA blood 6 ml	2-8 °C	17,500	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
ALK Gene FISH (BMG)	M737	12 days	FISH		paraffin embedded tissue block	Room temp	21,000	Out Lab	
Alkaptonuria	D130	5 days	manual		random urine 20 ml	2-8 °C	300	Out Lab	
Allergy IgE-Inhalants 16 Tests(BioStem)	J370	47 days	N/A		SST Tube 2 tubes (Special kit)	2-8 °C	26,600	Out Lab	
Allergy IgG-Inhalants 16 Tests(BioStem)	J371	47 days	N/A		SST Tube 2 tubes (Special kit)	2-8 °C	15,000	Out Lab	
ALP (Alkaline Phosphatase)	C580	1 day	Para-nitrophenyl Phosphate (Non-IFCC)	39 – 117 U/L	serum 1 ml	2-8 °C	60	In Lab	/
ALP Isoenzymes	C585	1 day	Para-nitrophenyl Phosphate in accordance with a standardized method Heat stable and heat labile		serum 2 ml	2-8 °C	300	In Lab	
Alpha 1-antitrypsin deficiency (SERPINA1 or A1AT)(LMGG)	MM076	1 month	Sanger's sequencing		EDTA whole blood 6 ml	2-8 °C	49,000	Out Lab	
Alpha 2 Macroglobulin	N337	1day	Nephelometry	1.3 - 3.0 g/L	Serum 1 ml	2-8 °C 7 days	1,400	In Lab	/
Alpha Fetoprotein (AFP) (BGH)	N410	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	240	In Lab	/
Alpha globin (HBA1/HBA2) gene sequencing for alpha thalassemia [BML]	M423	10 Days	PCR and direct sequencing of HBA1 and HBA2 gene		EDTA Blood 3-5 mL + แนนผล Hb typing (ควรรักษา และ บอก วิธีการทดสอบว่าเป็น CE หรือ HPLC)	Room temperature (1 day), 2-8°C (1 month)	5,100	In Lab	
Alpha globin gene triplication(Anti-3.7/Anti-4.2 type) (ATgenes)	MM614	9 days	PCR		EDTA whole blood 3 ml	2-8 °C	3,500	Out Lab	
Alpha Napthyl Acetate Esterase	A770	7 days	Yam LT Li Cy, Crosby WH		3 Bone marrow or peripheral blood smear , foil-wrap	2-8 °C	870	Out Lab	
Alpha Thal 1;2/HbCS (PCR) [Siriraj]	A800	23 days	Multiplex ARMS & GAP PCR		EDTA whole blood 5 ml	2-8 °C	4,800	Out Lab	
Alpha Thalassemia (SEA and THAI Type) [BML]	M400	3 days	Real-time GAP-PCR for SEA and THAI alpha thalassemia 1 deletion		EDTA Whole Blood 3-5 mL	Room temperature (1 day), 2-8°C (72 hr)	2,000	In Lab	/
Alpha thalassemia 1 (SEA and THAI deletion) (MGC)	MM509	23 days	Multiplex GAP PCR		Amniotic fluid 16-20 ml with maternal blood in EDTA tube 3 ml (Penetrate at the gestational age of 18-20 weeks and must be attached the father and mother's result of DNA typing every time)	Room temperature or 4-8 °C	2,200	Out Lab	
Alpha Thalassemia 1,2/HbCS/PS (Complete profile) (BML)	M421	8 days	Multiplex GAP-PCR for 7 alpha thalassemia 1 (SEA,THAI,FIL,20.5,MED) and 2 (3.7, 4.2) deletions including T-ARMS for Hb Constant Spring (CS) and Hb Pakse' (PS)		EDTA Blood 3-5 mL	Room temperature (1 day), 2-8°C (72 hr)	3,200	In Lab	/
Alpha thalassemia 2 (3.7 and 4.2 kb deletion) (MGC)	MM584	23 days	Multiplex GAP PCR		Amniotic fluid 16-20 ml with maternal blood in EDTA tube 3 ml (Penetrate at the gestational age of 18-20 weeks and must be attached the father and mother's result of DNA typing every time)	Room temperature or 4-8 °C	2,200	Out Lab	
Alpha Thalassemia Comprehensive (7 deletions + 22 point mutations) [BML]	M424	10 days	Multiplex GAP PCR for 7 common deletions and direct sequencing for 22 non-deletion mutations		EDTA Blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	6,400	In Lab	
Alpha Thalassemia deletion (Multiplex GAP PCR)(BML)	M422	8 days	Multiplex GAP-PCR for 7 alpha thalassemia 1 (SEA,THAI,FIL,20.5,MED) and 2 (3.7, 4.2) deletions		EDTA Blood 3-5 mL	Room temperature (1 day), 2-8°C (72 hr)	2,000	In Lab	/
Alpha Thalassemia PCR (Siriraj)	A801	23 days	Multiplex GAP PCR		EDTA whole blood 5 ml	2-8 °C	3,220	Out Lab	
Alpha Thalassemia profile step 2 (DNA for alpha1,2 and HbCS and Pakse)(Rama)	A016	16 days	Multiplex PCR		EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	1,900	Out Lab	
Alpha thalassemia sequencing (Chula)	M715	30 Days	PCR Sequencing		EDTA whole Blood 5 ml	2-8 °C	5,000	Out Lab	
Alpha Thalassemia(Alpha-thal 1,2) (Chula)	A615	23 days	PCR		EDTA whole blood 5 ml	2-8 °C	2,300	Out Lab	
Alpha Thalassemia(Common Profile) [PCT Lab]	A617	7 days	PCR		EDTA blood 3-5 ml	2-8 °C	2,500	Out Lab	
Alpha Thalassemia(Complete Profile) [PCT Lab]	A618	7 days	PCR & ASPCR		EDTA blood 3-5 ml	2-8 °C	2,880	Out Lab	
Alpha-1-Antitrypsin(Rama)	N581	11 days	Nephelometry	feces = 0.25-5.22 mg/dL , serum = 90-220 mg/dl	serum 1- 2 ml or Fresh Stool/Feces 1-2 gm	-	750	Out Lab	
Alpha-Galactosidase Level (Quest Diagnostics)	N318	14 Days	Fluorometric	0.074-0.457 u/l	Serum 2 mL	frozen	36,600	Out Lab	
ALT (Alanine Transaminase) /Serum Glutamic Pyruvate Transaminase (SGPT)	C600	1 day	Kinetic	0-40 U/L	serum 1 ml (no hemolysis)	2-8 °C	60	In Lab	/
Aluminium in Blood (ICP-MS)	S058	within 5 days (except check up group maybe longer)	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	1.20 - 17.30 µg/L "Forensic Science International 153 (2005) 39-44"	EDTA Plasma 1 mL**	Store at 2-8 °C	500	In Lab	/
Aluminium in Urine (ICP-MS)	S059	within 7 days (except check up group maybe longer)	Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	0.00-50.00 ug/g creatinine (Deutsche Forschungsgemeinschaft (DFG). 2018)	Random Urine 5-10 ml. Sampling time: End of shift.	Store at 2-8 °C	500	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
AMA / ASMA / anti-LKM	N502	4 days	IFA	Negative < 1:40	serum 1 ml	2-8 °C	980	In Lab	
Amikacin level	V311	1 day	Particle-enhanced turbidimetric inhibition immunoassay (PETINIA)		Serum 1 ml	8 hours capped at 15-25 °C 48 hours capped at 2-8 °C 4 weeks capped at -20 °C	700	In Lab	/
Amino Acid [RAMA]	C988	20 days	HPLC	-	Lithium heparinized plasma 3 ml, light protect	Frozen	3,625	Out Lab	
Amino Acids (ATGenes)	C211	16 Days	HPLC		Lithium heparin Plasma 3 mL or CSF 2 mL	Frozen	6,300	Out Lab	
Amino Acids (Urine) [ADL]	C986	23 days			24 hour urine in collection kit (only)	2-8 °C	21,000	Out Lab	
Amino Acids Analysis, Plasma (Thai cell Fix)	C735	30 Days			2ml plasma (preserved with sulfosalicylic acid)	Freeze	22,500	Out Lab	
Amino Acids Analysis, Urine (Thai cell Fix)	C736	22 Days			15ml Aliquot of urine (24-hour urine collection-preserved with sulfosalicylic acid) OR 15ml Aliquot of urine (First morning void-preserved with sulfosalicylic acid)	Freeze	22,500	Out Lab	
Aminoacylase deficiency (sequence analysis of ACY1 gene)(CGC genetics)	M677	67 days	Sanger		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	66,000	Out Lab	
Aminolevulinic acid (ALA)(RAMA)	V575	9 days	Spectrophotometry	0-6 mg/L	random urine 50 ml , protected from light	2-8 °C	380	Out Lab	
Aminolevulinic acid dehydratase (ALA-D) (RAMA)	V580	9 days	Spectrophotometry	108 - 299 U/mL erythrocytes	EDTA whole blood 3 ml	2-8 °C	460	Out Lab	
Ammonia	V490	1 day	Glutamate Dehydrogenase	หญิง 11-51 µmol/L ; ชาย 16-60 µmol/L	EDTA plasma 1 ml	Freeze	500	In Lab	/
Ammonia, Urine [Siriraj]	D201	9 days	ELISA	No normal range	Random Urine, 24 hr Urine ปริมาตร 30 ml (No preservative or preserved by 10 ml of 10% HCl)	2-8 °C	1,500	Out Lab	
Amphetamine(Screening in Gastric)	V850	5 days	color test		Gastric contents 20 ml	2-8oC	590	Out Lab	
Amphetamines	V720	1 day	kinetic interaction of microparticles in a solution (KIMS)		Random Urine 5 ml	2-8 °C	200	In Lab	/
Amphetamines Panel (GC/MS)(Rama)	V806	17 days	Gas Chromatography/Mass Spectrometry (GC/MS)		Serum 2 ml (DO NOT USE GEL TUBES) or urine 30 ml	2-8 °C urine ; ถ้าเก็บไว้นาน ให้freeze	2,750	Out Lab	
Amphetamines/Methamphetamine (Rapid screening)	V721	x	Immunochromatography		Random urine 5 ml	2-8 °C	105	In Lab	
Amplichip CYP450 profile (CYP2D6 and CYP2C19) (Rama)	B349	11 days	DNA microarray	-	EDTA whole blood 6 ml and Clotted blood 10 ml (do not separated)	2-8 °C	23,000	Out Lab	
Amylase	C140	1 day	Enzymatic (CNP3 Substrate)	8 – 53 U/L	serum 1 ml	2-8 °C	120	In Lab	/
Amylase (24 Hrs Urine)	C416	1 day	Enzymatic (CNP3 Substrate)		24 hrs-urine (No preservative)	2-8 °C	120	In Lab	
Amylase (Random Urine)	C480	1 day	Enzymatic (CNP3 Substrate)		Random urine 5 ml	2-8 °C	120	In Lab	/
ANA Profile	T210	2 day	Indirect immunofluorescence assay (IFA) and ELISA	ANA Negative titer <1:80 dsDNA <100 IU/mL Sm -Negative. RNP= Negative Negative	serum 1 ml(minimum 500 ul)	2-8 °C	1,400	In Lab	
ANA Profile (16 antibodies) (NHS)	T916	1 day	Immunoblot		Serum 2 ml	2-8 °C	1,500	In Lab	/
Anaerobic Culture	E310	14 days (in case of no growth)	conventional method		all types of samples from anaerobic site (in thioglycolate) or blood in anaerobic- hemo bottle	2-8oC	1,000	In Lab	
Anaerobic culture (Chula)	E315	9 days	anaerobic culture	-	anaerobe sample in modified cay-blair medium	room temp	1,080	Out Lab	
Anaerobic Culture (RAMA)	E442	23 days	conventional method	-	all types of samples from anaerobic site (in thioglycolate or in syringe without air-bubble)	room temp	1,330	Out Lab	
ANCA	T235	5 days	EIA	< 20 RU/ml negative >= 20 RU/ml positive	serum 1 ml	2-8oC	1,000	In Lab	
Androgen Receptor (AR) Gene (Siriraj)	MM504	4 Months	polymerase chain reaction (PCR) ทั้งหมด 8 exons (12 fragments) ของยีน AR และตรวจกรอง mutation ด้วยเทคนิค denaturing high-performance liquid chromatography (DHPLC) ตามด้วย direct DNA sequencing		EDTA whole blood 10 ml + clinical history	2-8 °C	18,750	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Androstenedione (LC-MS/MS)	S196	Within 8 days	Liquid chromatography tandem mass spectrometry (LC-MS/MS)	As the attached file in Example Lab Report	Serum 1 mL	Store & transport at 2-8 °C	1,700	In Lab	
Angelman syndrome [Rama]	MM646	60 days	SNRPN methylation specific PCR		EDTA blood 3-5 ml	2-8oC	3,500	Out Lab	
Angiostrongylus Ab (Siriraj)	P898	11 days	ELISA / Immunoblot		Serum 2 ml. or CSF 3-5 mL	2-8 °C	1,300	Out Lab	
Angiostrongylus antibody (Tropmed)	P713	16 days	immunoblot		serum or (CSF+Serum) 1-2 ml	2-8 °C	460	Out Lab	
Angiotensin Converting Enzyme (Mayo)	N526	10 Days	Spectrophotometry (SP)	> or =18 years: 16-85 U/L 0Y-17Y: ACE activity may be 20-50% higher in healthy children compared to healthy adults (16-85 U/L)	serum 2 ml	Frozen : Stability 180 Days	14,350	Out Lab	
ANORA Miscarriage testing(BCC)	MM602	16 Days	SNP Array detect 1) aneuploidy for all chromosomes and also identify source of aneuploidy (paternal or maternal) 2) large chromosome deletion or duplication 3) uniparental disomy		0.5 mm^3 tissue in container with PBS	2-8 oC	32,000	Out Lab	
Anti Basement Membrane IgA (Institute of dermatology)	T730	11 days	Indirect IFA	N/A	serum 1 ml	Freeze	870	Out Lab	
Anti Basement Membrane IgG (Institute of dermatology)	T740	11 days	Indirect IFA	N/A	serum 1 ml	Freeze	870	Out Lab	
Anti Basement Membrane IgM (Institute of dermatology)	T750	11 days	Indirect IFA	N/A	serum 1 ml	Freeze	870	Out Lab	
Anti CCP IgG	P345	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	600	In Lab	
Anti Centromere Antibody	T360	1 day	IFA	Negative	serum 1 ml	2-8oC	400	In Lab	
Anti D Titer (TRC)	L155	7 days	RBC immunology	N/A	Serum 10 ml and EDTA Whole blood 5 ml and antibody screening (O1,O2) report (TRC unaccept O1,O2 : Negative)	2-8 °C	500	Out Lab	
Anti Dnase B	T370	1days	nephelometry	< 200 U/ml	serum 1 ml	2-8oC	450	In Lab	
Anti EBNA (EBV Nuclear Ab)(Chula)	N370	11 days	ELISA	IgG cut off = 3 Unit	serum 1 ml	2-8 °C	690	Out Lab	
Anti GAD (Chula)	N627	1 months	ELISA	-	serum 1 ml	Freeze	1,440	Out Lab	
Anti GAD [Siriraj]	N186	1 months	IRMA		serum 1 ml	2-8 °C	5,600	Out Lab	
Anti GAD-IA2 (Chula)	N626	2 months	ELISA	-	serum 1 ml	Freeze	2,880	Out Lab	
anti GAD-IA2 (Rama)	N624	16 days	ELISA	N/A	serum 1 ml	2-8 °C	980	Out Lab	
Anti GAD-IA2 (Screening)	N189	7 days	ELISA	Negative	serum 1 ml	2-8 °C	2,000	In Lab	
Anti GAD-IA2(Siriraj)	N185	1 months	ELISA	Anti GAD Negative; <= 1 U/ml. Positive ; > 1 U/ml. Anti IA2 Negative; < 7.5 U/ml. Positive ; >= 7.5 U/ml.	2 tubes of serum , each tube contains serum 1 ml	2-8 °C	10,800	Out Lab	
Anti Glomerular Basement Membrane (anti GBM)[Siriraj]	T065	11 days	ELISA		Serum 2 ml (minimum 1 ml)	2-8 °C	1,270	Out Lab	
Anti Glomerular Basement Membrane(BRIA)	T800	35 days	IF		serum 2 ml	2-8 °C	8,130	Out Lab	
Anti Hepatitis A Virus IgG	N651	3 hrs	Chemiluminescent microparticle immunoassay (CMIA)	Negative	Serum 1 ml	2-8 °C	580	In Lab	
Anti IA2	N184	7 days	Euroimmune 2 P Analyser	Ratio < 1.0 Negative Ratio >= 1.0 Positive	serum 1 ml	2-8 °C	2,400	In Lab	
Anti IA2 (Chula)	N628	2 months	ELISA	-	serum 1 ml	Freeze	1,440	Out Lab	
Anti IA2 [Siriraj]	N187	30 Days	ELISA	Negative; < 7.5 U/ml Positive ; >= 7.5 U/ml.	serum 1 ml	2-8oC	5,300	Out Lab	
Anti Intrinsic Factor(BRIA)	N876	35 days	IF		serum 2 ml	2-8 °C stability 14 days	3,750	Out Lab	
Anti La (Anti SSB) (Chula)	T187	16 days	ELISA	N/A	serum 1 ml	2-8 °C	640	Out Lab	
Anti LA (Anti-SSB)	T390	7 days	ELISA	Ratio < 1.0 Negative Ratio >= 1.0 Positive	serum 1 ml	2-8oC	400	In Lab	
Anti Mitochondrial Antibody(AMA)	T250	5 days	IFA	Negative titer <1:40	serum 1 ml	2-8 °C	650	In Lab	
Anti Nuclear Factor(ANF,ANA)	T205	2 day	indirect Immunofluorescence assay (IFA)	Negative < 1:80	serum 1 ml (minimum 300 ul)	2-8 °C	300	In Lab	/
Anti Nuclear RNA (Anti nRNP)	T020	1 day	ELISA	Negative ratio < 1.0 Positive ratio >=1.0	serum 1 ml	2-8 °C	900	In Lab	/
Anti Parietal Antibody (APA)(BRIA)	T255	35 days	EIA		serum 2 ml	2-8 °C stability 21 days	3,500	Out Lab	
Anti Ro (Anti SSA) (Chula)	T186	16 days	ELISA	N/A	serum 1 ml	2-8 °C	640	Out Lab	
Anti RO (Anti-SSA)	T380	7 days	ELISA	Ratio < 1.0 Negative Ratio >= 1.0 Positive	serum 1 ml	2-8oC	400	In Lab	
Anti SCL 70(Rama)	T700	11 days	EIA		serum 1 ml	2-8 °C	460	Out Lab	
Anti Smith Antibody	T340	1 day	ELISA	Negative ratio <1.0 Positive ratio >= 1.0	serum 1 ml	2-8 °C	300	In Lab	/
Anti Smooth Muscle Antibody (ASMA)	T245	5 days	IFA	Negative titer <1:40	serum 1 ml	2-8 °C	400	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Antibody Screening and Identification [TRC]	L041	5 days	RBC immunology	N/A	EDTA whole blood 5 ml, ACD 5 ml and Serum 10 ml	2-8 °C	600	Out Lab	
Anticardiolipin Antibody (IgA)	T902	5 days	ELISA	< 12 PL-IgA-U/ml negative >= 12 PL-IgA/ml positive	Serum 1 ml	2-8oC 14 days	600	In Lab	
Anticardiolipin Antibody (IgG)	T900	5 days	ELISA	< 12 PL-IgG-U/ml negative >= 12 PL-IgG-U/ml positive	Serum 1 ml	2-8oC 14 days	600	In Lab	/
Anticardiolipin Antibody (IgM)	T901	5 days	ELISA	< 12 PL-IgM-U/ml negative >=12 PL-IgM-U/ml positive	Serum 1 ml	2-8oC 14 days	600	In Lab	/
Anticardiolipin Antibody Screening	P500	4 days	ELISA		serum 1 ml	2-8 °C	600	In Lab	
Anticardiolipin Antibody(IgA,IgM,IgG)	T720	5 days	ELISA	< 12 PL-IgG-U/ml negative >= 12 PL-IgG U/ml positive < 12 PL-IgM-U/ml negative >= 12 PL-IgM U/ml positive < 12 PL-IgA-U/ml negative >= 12 PL-IgA U/ml positive	Serum 1 ml	2-8oC 14 days	1,400	In Lab	
Antidepressants (Screening)(Siriraj)	V851	5 days	color test		Gastric contents 20 ml or urine 10 ml	2-8 °C	1,065	Out Lab	
Antidepressants and antipsychotics pharmacogenetics(CGC genetics)	M678	37 Days	PCR		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	14,870	Out Lab	
Anti-Desmoglein 1 (Dsg1) Ab [Rama]	T222	11 days	EIA	Negative (< 20 U/ml.)	Serum 1-2 ml.	2-8 °C	1,100	Out Lab	
Anti-Desmoglein 3 (Dsg3) Ab [Rama]	T223	11 days	EIA	Negative (< 20 U/ml.)	Serum 1-2 ml.	2-8 °C	1,100	Out Lab	
Anti-DNA (double-stranded)(Rama)	T795	7 Days	EIA	negative (0-100 IU/mL)	serum 1 ml	2-8 °C	500	Out Lab	
Anti-dsDNA	T220	1 day	ELISA	<100 IU/mL	serum 1 ml	2-8 °C	700	In Lab	/
Anti-Factor Xa (Chula)	A210	5 days	chromogenic assay		Citrate plasma 2 ml in plastic tube	Frozen	640	Out Lab	
Anti-Factor Xa (Rama)	K155	3 days	Chromogenic	therapeutic range Leo 0.3-0.7 IU/ml Inoxa 0.5-1.0 IU/ml (twice a day) 1.0-2.0 IU/ml (once a day)	Na citrate plasma 2 ml	Freeze	690	Out Lab	
Anti-Factor Xa [Siriraj]	K376	5 days	Chromogenic assay		Na citrate plasma 2 ml	Freeze	1,330	Out Lab	
Antihistamines(Screening in Gastric)(Siriraj)	V852	5 days	color test		Gastric contents 20 ml	2-8oC	300	Out Lab	
Anti-HTLV-I/HTLV-II (PCT)	N896	3 Days	The ABBOTT PRISM HTLV-I/HTLV-II assay is a three-step sandwich ChLIA	Non Reactive	Serum 1 mL	2-8 C 14 days	840	Out Lab	
Anti-IFN (Interferon)-Gamma Autoantibody (Siriraj)	T101	20 days	ELISA (Indirect Manual)		serum 1 ml Not accept lipemic and Hemolysis sample	Frozen / shipping on ice	2,375	Out Lab	
Antimony in Urine (ICP-MS)	S057	within 7 days (except check up group maybe longer)	Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)	Normal person: < 3.00 ug/g Creatinine Exposed person: < 35.00 ug/g Creatinine Reference rance obtained from "Industrial Chemical Exposure; Guidelines for Biological Monitoring. (2001). (3rd edition.)	Random Urine 5-10 mL Sampling time :End of shift	Store at 2-8 °C	400	In Lab	/
Anti-Mullerian Hormone (AMH)	N681	1 day	Electrochemiluminescence immunoassay (ECLIA)	ng/ml	serum 2 ml	2-8oC,5 days (serum)	2,400	In Lab	
Anti-Myelin Oligodendrocyte Glycoprotein (Anti-MOG) (Prasat Neurological Institute)	N894	9 days	Cell based assay	Negative <1:10	1. Serum 2 ml. (minimum 2 ml) or 2. CSF 0.5-1 ml. (minimum volume 500 ul)	2-8 °C	1,875	Out Lab	
Anti-Neuronal IgG Profile (Chula)	N509	1 mount	IFA		Serum 3 ml	2-8 °C	3,000	Out Lab	
Antioxidant, 10 Lipid and water soluble vitamins (HPLC)	S072	within 5 days	HPLC		Serum 2 mL .	Light protected at 2-8 °C	4,100	In Lab	
Anti-pneumococcal IgG (Serotype) [Siriraj]	J223	21 Days	ELISA [Indirect Manual]		serum 1 ml Please specify sample pre or post vaccination	Freeze	8,780	Out Lab	
Antithrombin III	K220	5 days	chromogenic assay	71.6 - 140.5 %	Na Citrate plasma 1 ml	Freeze	800	In Lab	/
Apixaban level (Chula)	V718	5 days	chromogenic assay		Citrate plasma 2 ml in plastic tube	Frozen	2,000	Out Lab	
Apo E Genotype(Siriraj)	B105	30 days	allele specific detection	-	EDTA whole blood 5 ml	2-8 °C	1,330	Out Lab	
APOE genotype for Alzheimer's disease (Alleles E2, E3 and E4) [BML]	M221	10 days	Multiplex Tetraprimers-ARMS PCR for codon 112 and 158 of ApoE gene	Wild-type of apolipoprotein is E3/E3.	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,350	In Lab	
APOE genotype for Alzheimer's disease (Alleles E2, E3 and E4) [BML](Stat)	M222	3 days	Multiplex Tetraprimers-ARMS PCR for codon 112 and 158 of ApoE gene	Wild-type of apolipoprotein is E3/E3.	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	2,200	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
APOE genotype for cardiovascular diseases(Alleles E2, E3 and E4)(BML)	M223	10 days	Multiplex Tetraprimers-ARMS PCR for codon 112 and 158 of ApoE gene	Wild-type of apolipoprotein is E3/E3.	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,350	In Lab	
Apolipoprotein A(Chula)	C900	11 days	immunoturbidity	Female 117-220 mg/dl Male 115-190 mg/dl	serum 1 ml	2-8 °C	410	Out Lab	
Apolipoprotein A-1	C798	1day	Immunoturbidimetric assay	Men 1.04 - 2.02 g/L Women 1.08 - 2.25 g/L	Serum 1 ml	2-8 °C 8 days	450	In Lab	/
Apolipoprotein B(Chula)	C910	11 days	immunoturbidity	Female 60-150 mg/dl Male 70-160 mg/dl	serum 1 ml	2-8 °C	410	Out Lab	
APP gene mutations for Alzheimer's disease [BML]	M215	2 months	PCR and direct sequencing of exon 16 and exon 17 of APP gene which are hotspot for AD1 mutations		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	21,000	In Lab	
APP gene mutations for Alzheimer's disease [BML] (STAT)	M216	1 month	PCR and direct sequencing of exon 16 and exon 17 of APP gene which are hotspot for AD1 mutations		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	26,400	In Lab	
APT Test for Fetal Hb	D300	2 days	Discoloration	Negative	Gastric contents or stool with blood	2-8 °C	90	In Lab	
Array CGH (Medical Genetics Center)	M957	14 days	Comparative genomics hybridization using oligo micro-array technique		Blood 5 ml in EDTA tube	Room temperature or 4-8 °C, no freeze	25,000	Out Lab	
Array CGH Optima (Prenatal) (BCC)	MM061	16 days			Amniotic fluid 15-20 ml	4oC	21,000	Out Lab	
Arsenic (Urine)(Reference toxico)	V429	35 Days	AAS	= < 35 ug/L	Urine 20 ml.	2-8 °C	500	Out Lab	
Arsenic in Blood (ICP-MS)	S229	within 7 days (checkup group maybe longer)	ICP-MS	Less than 13.00 ug/L	EDTA plasma 1 mL	Store at 2-8 °C	460	In Lab	
Arsenic in Urine (ICP-MS)	S230	within 7 days (except check up group maybe longer)	ICP-MS	Normal person: < 50.00 ug/L Exposed person: < 100.00 ug/L Reference range from "Casarette & Doull's: Toxicology, The Basic Science of Poisons; 6th Edition p 820-821	Random Urine 5-10 ml.***	Store at 2-8 °C	600	In Lab	/
Arsenic in Urine for BDMS Occupational Medicine (ICP-MS)	S232	within 7 days (checkup group >100 samples maybe longer)	ICP-MS	Normal person: < 50.00 ug/L Exposed person: < 100.00 ug/L Reference range from "Casarette & Doull's: Toxicology, The Basic Science of Poisons; 6th Edition p 820-821	Random Urine 10-20 mL .	Store at 2-8 °C	600	In Lab	
Arsenic(Screening in Gastric)(Siriraj)	V853	5 days	color test		Gastric contents 20 ml	2-8oC	300	Out Lab	
Arylsulphatase A(WCH)	B225	30 days			EDTA whole blood 6 ml , refrigerated shipment , should be sent on Fri or Mon	2-8 °C	13,200	Out Lab	
Aseptic Meningitis Multiplex PCR (ETV, VZV, HSV)	M420	3 days	Real-time PCR		CSF ≥ 0.5 mL (Update: 18/10/2019)	Frozen (-20°C to -80°C)	3,000	In Lab	
ASO (Anti-Streptolysin O Titre)	P220	1 day	Latex agglutination		serum 1 ml	2-8 °C	120	In Lab	
ASO (Anti-streptolysin O), Quantitative (Siriraj)	T121	7 days	Nephelometry		serum 1 ml	Frozen ; stability 1 months Refrigerated at 2- 8 C ; stability 1 day	720	Out Lab	
AST (Aspartate Transaminase)/Serum glutamic oxaloacetic transaminase (SGOT)	C610	1 day	Enzymatic (NADH (without P-5'-P))	0-40 U/L	serum 1 ml (no hemolysis)	2-8 °C	80	In Lab	/
Atazanavir level (Chula)	C199	30 Days	HPLC		Heparinized plasma 2 ml , Freeze (collect blood after drug uptake 12 hours) + Special request form	Frozen	1,990	Out Lab	
Autoimmune cerebellar degeneration cranial nerves, spinal cord, peripheral nerve dysfunction (Prasat Neurological Institute)	T812	11 days	IF = Indirect Immunofluorescence	Negative <1:120	1. serum 2-5 ml (minimum 2 ml) Or 2. CSF 0.5-1 ml (minimum 0.5 ml) Or	2-8 °C	3,375	Out Lab	
Autoimmune encephalitis antibody (Chula)	T911	30 Days	microscopic immunofluorescence		serum 2 ml or CSF 1 mL	2-8 °C	4,030	Out Lab	
Autoimmune encephalopathy, basal ganglion and diencephalic dysfunction (Prasat Neurological Institute)	T811	11 days	IF = Indirect Immunofluorescence	Negative <1:120	1. serum 2-5 ml (minimum 2 ml) or 2. CSF 0.5-1 ml (minimum 0.5 ml)	2-8 °C	4,995	Out Lab	
Autoimmune Liver Disease Panel (ANA/ASMA/AMA)	T115	5 days	IFA	ANA Negative titer <1:80 ASMA Negative titer <1:40 AMA Negative titer <1:40	serum 2 ml	2-8 °C	650	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Autoimmune Liver Profile	T910	1 day	Immunoblot	Negative	serum 1 ml	2-8 °C	2,630	In Lab	
Autosomal dominant polycystic kidney disease (PKD1, PKD2)(LMGG)	MM069	3 months			EDTA whole blood 6 ml	2-8 °C	71,400	Out Lab	
Autosomal recessive polycystic kidney disease (PKHD1)(LMGG)	MM641	3 months			EDTA whole blood 6 ml	2-8 °C	71,400	Out Lab	
AZF deletion by PCR (LMGG)	MM075	16 days	Multiplex PCR		EDTA whole blood 3 ml	2-8 °C	11,900	Out Lab	
B cells (IGH) clonal rearrangement(CGC genetics)	M679	37 Days	PCR		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	33,000	Out Lab	
Babesia microti Antibodies (IgG, IgM)(Questdiagnostics)	P030	30 Days	Immunofluorescence Assay	Babesia microti Antibodies IgG <1:64 Babesia microti Antibodies IgM <1:20 (Update 14/09/2012) Not used IgG: <1:16 IgM: <1:20	serum 2 ml (VOLUME : Standard: 1 mL - Minimum: 0.1 mL)	2-8 °C Specimen Stability Room temperature: 72 hours Refrigerated: 7 days Frozen: 30 days	17,800	Out Lab	
Bacteria : molecular identification (Siriraj)	E446	16 days	16S rDNA polymerase chain reaction (PCR) sequencin	-	fluid or pus from sterile site in sterile container or purified colonies or EDTA whole blood 3 ml	2-8 °C	3,200	Out Lab	
Bacteria: antigen in CSF (PROFILE)(Siriraj)	P054	3 Days	Latex agglutination	Negative	CSF1 mL in sterile container	Room temp.	3,400	Out Lab	
Bacterial Identification & Sensitivity [NHS]	E006	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		pure colony on plate	Room temperature	700	In Lab	/
Bacterial Identification (Outlab)(Rama)	E009	30 Days	culture	-	Colony (Note primary specimen)	room temp.	750	Out Lab	
Bacterial Identification [NHS]	E005	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		pure colony on plate	Room temperature	400	In Lab	/
Bacterial Identification&Sensitivity(Outlab)	E008	30 Days			Colony on plate (Note primary specimen)	room temp.	1,950	Out Lab	
Bacterial Meningitis Panel Multiplex PCR [BML]	M419	3 days	Multiplex Real-time PCR assay for 6 assigned bacteria		CSF 0.5-1 mL (Minimum volume 0.5 mL)	2-8°C / Frozen	4,700	In Lab	
Barbiturates in urine (KIMS)	V872	1 day	Enzyme Immunoassay		Random urine 5 ml	2-8 °C	650	In Lab	
Barbiturates Panel (GC/MS)(Rama)	V370	17 days	Gas Chromatography/Mass Spectrometry (GC/MS)		Serum 2 mL (DO NOT USE GEL TUBES) or urine or gastric content 20 ml	2-8 °C	1,960	Out Lab	
Bartonella Antibody Panel, IgG and IgM(Mayo)	N342	12 days	Immunofluorescence Assay (IFA)		Serum 1 ml,Frozen	Frozen(Stability 30 days)	13,060	Out Lab	
Bartonella DNA PCR (Qualitative)(Quest diagnostic)	E630	30 Days	Real-Time PCR		EDTA Whole blood 1 ml	2 - 8 C (stability 7 days)	33,000	Out Lab	
Basic Profile Intestines (Biovis 013)	C692	16 days	N/A	-	stool 5 gram in 2 sterile container	2-8 °C	14,500	Out Lab	
Basic β-globin ARMS-PCR (10 mutations) (ATGenes)	M923	9 days	ARMS-PCR		3-6 mL EDTA blood	2-8 °C	2,300	Out Lab	
BCR/ABL (Direct Sequencing) [Rama]	B448	23 days	Direct Sequence		EDTA blood 3-5 ml or EDTA Bone Marrow 3-5 ml	room temp	11,050	Out Lab	
BCR/ABL (FISH) [Chromosome center]	B227	16 days	FISH	N/A	Heparinized whole Blood 5 ml	2-8 °C	4,600	Out Lab	
BCR/ABL (FISH) [Rama]	B231	23 days	FISH		EDTA or Heparinized whole blood /Bone marrow 3-5 ml.	2-8 °C	4,000	Out Lab	
BCR/ABL (RQ-PCR) Quantitative (Siriraj)	B232	16 Days	real-time quantitative polymerase chain reaction with real-time PCR automate	Reference range (IS unit) BCR-ABL / ABL (IS unit) <10% = MCyR BCR-ABL / ABL (IS unit) <1% = CCyR BCR-ABL / ABL (IS unit) <0.1%= MMR BCR-ABL / ABL (IS unit) <0.01= CMR4 BCR-ABL / ABL (IS unit) <0.0032 = CMR4.5	EDTA whole blood 3 ml x 4 tubes	Should be send to subcontract immediately ,if cannot store at 2-8 C only 24 hrs.	5,750	Out Lab	
BCR/ABL (RT-PCR for CML) [Rama]	A780	23 days	RT PCR		EDTA whole blood 5 ml or EDTA bone marrow 5 ml	room temp	2,300	Out Lab	
BCR/ABL (RT-PCR) Qualitative (Siriraj)	A782	16 days	RT PCR	N/A	EDTA bone marrow 6 ml or EDTA whole blood 6 ml *ห้ามต่ำกว่า 6 ml* และแบบผล CBC ด้วยทุกครั้ง	2-8 °C	3,200	Out Lab	
BCR/ABL P210 (RQ-RCR) [Rama]	B226	23 days	RQ-PCR (Real-time quantitative polymerase chain reaction)		EDTA whole blood 5 ml or EDTA bone marrow 5 ml	room temp	5,180	Out Lab	
BCR/ABL Quantitative RQ-PCR (GeneXpert) [BML]	M366	3 days	Quantitative Real-time PCR Nested PCR (p210 against ABL reference gene)		EDTA whole blood 6 ml + CBC result (if any)	store blood specimen at 2-8oC for up to 72 hr (DO NOT FREEZE)	7,670	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
BCR/ABL RT-PCR (Chulabhorn Hospital)	B229	16 days	Real time PCR	N/A	EDTA Blood or EDTA Bone marrow 3-5 ml +CBC result	2-8 oC , Overnight just 1 night	2,300	Out Lab	
BCR/ABL(p210) RQ-PCR (Chulabhorn Hospital)	B228	16 days	Real time PCR	N/A	EDTA Blood or EDTA Bone marrow 3-5 ml+ CBC result	2-8 oC can overnight just 1 night	5,180	Out Lab	
Bence Jones Protein	D140	1 day	MTSA (Modified Toluene sulfonic acid)		Random urine 5 ml	2-8oC	200	In Lab	
Benzene (Phenol, Urine) [Reference Toxicol]	V504	23 days	GC	x	Urine 20 ml (minimum 10 ml)	2-8 °C	600	Out Lab	
Benzene (trans, trans Muconic acid) (HPLC)	S019	within 7 days (except checkup group)	HPLC	0.00 - 500.00 ug/g creatinine (ACGIH2020)	Random Urine 10-20 mL.(End of shift)	Store at 2-8 °C	450	In Lab	/
Benzene in Blood (HS-GC-MS)	S085	within 5 days(except checkup group)	GC-MS	<0.05 mg/L	NaF or EDTA whole Blood 2 mL	Store at 2-8 °C	550	In Lab	/
Benzene(Phenol)(BOMC)	V505	16 days	HPLC	Non-exposed person < 20 mg/L Exposed person < 50 mg/L	random urine 20 ml	2-8 °C	450	Out Lab	
Benzodiazepine (PSU)	V733	4 Days	FPIA		Urine,Clotted,serum	2-8 °C	690	Out Lab	
Benzodiazepine(Blood)	V731	5 days	Enzyme Immunoassay (Architech)	(Therapeutic range 50.00-250.00) Detection limit < 4.0 ng/ml	serum 2 ml	2-8 °C	800	Out Lab	
Benzodiazepine(Screening in Gastric)	V855	5 days	color test	N/A	Gastric contents 15-20 ml	2-8 °C	800	Out Lab	
Benzodiazepine(Urine)	V730	1 day	Enzyme Immunoassay		Random urine 5 ml	2-8 °C	300	In Lab	/
Beta 2 Glycoprotein 1 (IgG,IgM,IgA)	N038	5 days	ELISA	> 20 RU/ml Negative >= 20 RU/ml Positive	serum 1 ml	2-8 oC	2,200	In Lab	
Beta 2 Glycoprotein 1 IgA	N037	5 days	ELISA	> 20 RU/ml Negative >= 20 RU/ml Positive	serum 1 ml	2-8oC	1,200	In Lab	
Beta 2 Glycoprotein 1 IgG	N017	5 days	ELISA	> 20 RU/ml Negative >= 20 RU/ml Positive	serum 1 ml	2-8oC	550	In Lab	/
Beta Crosslaps	N070	1 day	Electrochemiluminescence immunoassay "ECLIA"		EDTA plasma 1 ml (fasting)	2-8 °C	700	In Lab	
Beta gene thalassemia testing (Sirira)	A817	30 Days	Multiplex Arms DGCE (denaturing gradient gel electrophoresis)		EDTA whole blood 3-5 ml	2-8 °C (1 week)	3,000	Out Lab	
Beta globin gene sequencing (Beta thalassemia point mutations) [BML]	M429	10 days	PCR and direct sequencing of HBB gene		EDTA Blood 3 ml + ตัวอย่างผล Hb typing	2-8oC 1 month Room temperature 1 days	5,100	In Lab	
β-globin gene deletions (10 deletions) (ATGenes)	M922	14 Days	Multiplex Gap-PCR		3-6 mL EDTA blood	2-8 °C	3,300	Out Lab	
Beta HCG	N150	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	250	In Lab	/
Beta thalassemia 21 Mutations (Direct sequencing) [BML]	M427	10 days	PCR and direct sequencing of HBB gene		EDTA Blood 3 ml + ตัวอย่างผล Hb typing (ตัวพิมพ์)	2-8oC 1 month Room temperature 1 days	3,380	In Lab	
Beta thalassemia 45 Mutations (Direct sequencing) [BML]	M428	10 days	PCR and direct sequencing of HBB gene		EDTA Blood 3 ml + ตัวอย่างผล Hb typing (ตัวพิมพ์)	2-8oC 1 month Room temperature 1 days	3,860	In Lab	
Beta thalassemia common mutation (10 mutations) (MGC)	MM585	23 days	ARMS-PCR		Amniotic fluid 16-20 ml with maternal blood in EDTA tube 3 ml (Penetrate at the gestational age of 18-20 weeks and must be attached the father and mother's result of DNA typing every time.)	Room temperature or 4-8 °C	2,500	Out Lab	
Beta Thalassemia common mutation (21 mutations) (MGC)	MM586	23 days	ARMS-PCR		Amniotic fluid 16-20 ml with maternal blood in EDTA tube 3 ml (Penetrate at the gestational age of 18-20 weeks and must be attached the father and mother's result of DNA typing every time.)	Room temperature or 4-8 °C	2,250	Out Lab	
Beta thalassemia Common Thai Mutations (18 mutations and 3.48kb deletions) [BML]	M403	10 days	PCR and direct sequencing for 18 point mutations GAP-PCR for beta 0 thalassemia 3.48kb deletion		EDTA Blood 3 ml + Hb typing result (Hb typing result must be performed at N Health Laboratory.)	2-8oC 1 month Room temperature 1 days	2,100	In Lab	
Beta thalassemia gene deletions (b0-3.48kb, HPFH6, Hb Lepore and db0-THAI) [BML]	M425	8 days	Multiplex Gap-PCR for b0-3.48kb, HPFH6, Hb Lepore and db0-THAI		3-5 mL EDTA blood with Hemoglobin typing and beta thalassemia point mutation result	2-8 °C	2,000	In Lab	
Beta thalassemia Multiplex PCR (21 Mutations) (Rama)	A041	16 Days	Multiplex PCR		EDTA Blood 3 mLx 2 tubes	2-8 °C	3,380	Out Lab	
Beta thalassemia point mutation (Rama)	B034	30 Days	PCR sequencing		EDTA whole blood 10 ml	2-8 °C	5,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Beta thalassemia sequencing (Chula)	M716	45 Days	PCR Sequencing		EDTA whole Blood 5 ml	2-8 °C	6,300	Out Lab	
Beta Thalassemia, Hemoglobinopathy of beta globin chain and Sickle Cell Disease (HBB)(LMGG)	M955	30 Days	Sanger Sequencing		EDTA blood 6 ml (3 ml for children < 8 years)	room temp (20-25°C),4°C - Stability 3-5 days	7,500	Out Lab	
Beta2 glycoprotein IgM	P050	5 days	ELISA	> 20 RU/ml Negative >= 20 RU/ml Positive	serum 1 ml	2 - 8 oC	1,040	In Lab	/
Beta-2 Transferrin (Mayo)	N524	10 Days	Electrophoresis/Immunofixation-Peroxidase Antisera/Dimethylformamide Visualization	Negative, no beta-2 transferrin (spinal fluid) detected	body fluid (nasal, otic, etc.) or CSF 1 ml	Frozen	20,000	Out Lab	
Beta-2-Microglobulin	N440	5 days	Nephelometry	1.09 - 2.53 mg/L	serum 2 ml	2-8 °C	870	In Lab	/
Beta-2-Microglobulin (Urine)	N343	5 days	Nephelometry	< 0.2 mg/L	Random urine 10 ml	2-8 °C	800	In Lab	
Beta-Amyloid +Total -Tau +Phospho-Tau (CSF)	N895	7 days	ELISA	Total-Tau protein 153 - 701 pg/ml Phospho-Tau protein <61 pg/ml beta-amyloid (1-42) 346 - 821 pg/ml beta-amyloid (1-40) 2622 - 5327 pg/ml	CSF 1.8 ml in polypropylene tube	-20 oC และนำส่งทันที (pack dry ice)	24,990	In Lab	
Beta-Amyloid and Total -Tau protien (CSF)	N872	7 days	ELISA	Total-Tau protein 153 - 701 pg/ml beta-amyloid (1-42) 346 - 821 pg/ml beta-amyloid (1-40) 2622 - 5327 pg/ml	CSF 1.8 ml in polypropylene tube	-20 oC และนำส่งทันที (pack dry ice)	17,500	In Lab	
Beta-Amyloid and Total -Tau protien (CSF) (Stat)	N873	3 days	ELISA	Total-Tau protein 153 - 701 pg/ml beta-amyloid (1-42) 346 - 821 pg/ml beta-amyloid (1-40) 2622 - 5327 pg/ml	CSF 1.8 ml in polypropylene tube	Freeze	26,000	In Lab	
Beta-Carotene (HPLC)	S009	within 7 days	HPLC	54-591 µg/L	Serum 1 ml	Light protected at 2-8 °C	1,600	In Lab	/
Bile (Harrison spot test)(RAMA)	D412	5 days	Harrison spot test	-	urine or body fluid 2 ml	2-8 °C	410	Out Lab	
Bile Acids ,Total (Quest Diagnostics)	C696	14 Days	Enzymatic	0-19 umol/L	Fasting serum 1 ml. (Centrifuge within 1 hour.) Minimum Volume 0.5 mL Fast for 8 hours	2-8 oC (stability 7 Days) Specimen Stability Room temperature: Unacceptable Refrigerated: 7 days Frozen: 30 days	24,700	Out Lab	
Bilirubin (Total,Direct)	C560	1 day	Total bilirubin : Diazonium Salt... Direct bilirubin : Diazo Reaction	F/M 0.0010-0.0020 mg/dL F/M 0.0020-0.0050 mg/dL F/M 0.003-0.0050 mg/dL 0.12 mg/dL F/M 0.006-0.007 mg/dL 0.00 mg/dL F/M 0.008-999 mg/dL 0.20.2 mg/dL	serum 1 ml	2-8 °C protected from light	100	In Lab	/
Biological Age Sensor (Rapport/Genosense)	B617	35 days	SNPs		Buccal swap in special kit	Room Temperature	14,700	Out Lab	
BK virus PCR (Qualitative) [BML]	M172	3 days	Real-time PCR (Taqman probe) for VP1 gene of BK polyomavirus	1-3% of healthy adults continuously excrete BKV in their urine.	EDTA plasma or serum 1 mL Urine 10 mL CSF 0.5 ml	2-8°C	2,200	In Lab	
BK Virus PCR [Rama]	H036	4 days	real time PCR		EDTA plasma 2 ml or CSF/Fluid 1 ml or urine 5 ml , perform immediately	Plasma/ Fluid ; Freeze urine ; transport at 2-8 °C, do not freeze	1,960	Out Lab	
BK Virus Viral Load [Rama]	H035	4 days	Hydrolysis Probe		EDTA plasma 2 ml or CSF/Fluid 1 ml or urine 5 ml , perform immediately	Plasma/ Fluid ; Freeze urine ; transport at 2-8 °C, do not freeze	2,300	Out Lab	
Bleeding Time	K010		Ivy Method/Coagulation	1-6 min			60	In Lab	
Blood Urea Nitrogen	C530	1 day	Kinetic test with urease and glutamate dehydrogenase	8- 20 mg/dl	serum 1 ml	2-8 °C	60	In Lab	/
Body Fluid Culture & Sensitivity(OPD)	E051	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		Body fluid	2-8 °C CSF : Room temperature	300	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Body myopathy with Paget disease and frontotemporal dementia (sequence analysis of VCP gene)(CGC genetics)	M660	67 days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	53,000	Out Lab	
Bordetella Multiplex PCR (B. pertussis/parapertussis and holmesii)	M255	3 Days	Real-time RT-PCR (Taqman probe) for Bordetella pertussis/Bordetella holmesii IS481, Bordetella holmesii HIS1001 and Bordetella parapertussis pIS1001		Nasopharyngeal aspirate, Sputum, Nasopharyngeal wash, Nasopharyngeal swab	2-8oC 3 DAYS -20oC 1 month	3,100	In Lab	
Bordetella pertussis Culture	E627	14 days	Culture		Nasopharyngeal swab in Ameies transport media	Room Temp.	600	Out Lab	
Bordetella pertussis PCR	E515	11 days	Real-time PCR		Nasopharyngeal aspirate 1 ml or Nasopharyngeal swab , freeze , transport within 48 hours ,on ice	Frozen	1,500	Out Lab	
Borrelia Ab.IgG (BPL)	P027	3 days	IF		serum 1-2ml Or CSF 1 ml	2-8 °C (stability 3-7 days) -20 °C (stability 15 days) คุณทิพา ทร BPL 24/08/2010	1,730	Out Lab	
Borrelia Ab.IgM (BPL)	P026	3 days	IFA		serum 1-2 ml	2-8 °C (stability 3-7 days) -20 °C (stability 15 days) คุณทิพา ทร BPL 24/08/2010	1,730	Out Lab	
BRAF V600 Mutation in FFPE (COBAS) [BML]	M493	10 days	Allele-specific, real-time PCR test for the qualitative detection and identification of in BRAF gene (BRAF Exon 11 and Exon 15)	N/A	Formalin-fixed, paraffin-embedded tissue block (FFPE) + H and E Slide + Pathology report	Room temperature	8,470	In Lab	/
BRAF V600E Mutation Test (BML In-house)	M341	7 days	Real-time PCR for BRAF V600E mutation		Melanoma, Colorectal cancer, Papillary thyroid cancer in Formalin-Fixed, Paraffin-Embedded tissue block (FFPE) containing at least 50% tumor cells	Room temp.	3,500	In Lab	/
Brain natriuratic peptide(BNP)	N175	1 day	Chemiluminescent microparticle immunoassay (CMIA)		EDTA plasma 1 ml	2-8 °C	1,800	In Lab	/
BRC A1,A2	B205	4 mouth	polymerase chain reaction (PCR) และตรวจกรอง mutation ด้วยเทคนิค denaturing high-performance liquid chromatography (DHPLC) ตามด้วย direct DNA sequencing		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	60,200	Out Lab	
BRCA1&2 germline mutation (Blood) (BML)	MM201	15 Days	Next Generation Sequencing (NGS)		EDTA blood at 2-4 ml x 2 tube (only germline mutation)	Storage at 2-8°C, 7 Days	33,480	In Lab	
BRCA1&2 somatic mutation (FFPE) (BML)	MM202	15 Days	Next Generation Sequencing (NGS)		FFPE tissue with tumor cells (use FFPE block, not slide) + H&E slide + Pathology report register R887	Room temperature (For FFPE)	33,480	In Lab	
Breast cancer (BRCA1,BRCA2)(Business Alignment, BA)	MM512	30 days	Next generation sequencing (NGS)		6 mL EDTA blood in special kit	2-8 °C	94,000	Out Lab	
Bromide (RAMA)	V510	7 days	Spectrophotometry		serum 2 ml	2-8 °C	430	Out Lab	
Brucella antibody	P707	2 days	agglutination	Negative	serum 1 ml	2-8 °C	400	In Lab	
Brucella IgG and IgM (DMSC)	P699	9 days	agglutination and ELISA (แต่รายงานผลเฉพาะ ELISA แยก IgG และ IgM)		serum 1 ml (minimum 500 ul)	2-8 °C	1,900	Out Lab	
Brugada (Promotor of SCN5A) (RAMA)	B079	20 Days	PCR Sequencing		EDTA Whole Blood 5-10 ml	2-8 °C	5,000	Out Lab	
Brugada Syndrome (sequence analysis of SCN5A gene)(CGC genetics)	M680	67 days	NGS		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	52,000	Out Lab	
Burnout Sensor (Rapport/Genosense)	B618	35 days	SNPs		Buccal swap in special kit	Room Temperature	14,700	Out Lab	
C difficile toxin	V645	2 days	ELFA (Enzyme-linked fluorescent assay) (เครื่อง Vidas)	Negative	Stool (Sterile container)	2-8oC 3days	550	In Lab	/
C.trachomatis / N.gonorrhoea PCR (Aptima)	M135	8 days	Transcription-Mediated Amplification (TMA) and Hybridization Protection Assay(HPA) for CT/GC rRNA		1. Cervical specimens collected in PreservCyt Solution 2-5 mL 2.Female endocervical and male urethral swab specimen collected by the APTIMA Unisex Swab Specimen Collection Kit. 3.Male and female urine specimens collected in the APTIMA urine specimen transport tubes.	2-30°C for up to 30 days	2,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
C.trachomatis and N.gonorrhoea PCR [BML]	M465	8 days	Real-time PCR (Taqman probe) for Chlamydia trachomatis (Cryptic plasma and mOmp) and Neisseria gonorrhoea		1. Endocervical swab and vaginal swab specimens collected with the cobas® PCR Media Dual Swab Sample Kit 2. Male and Female urine (5-10 mL) collected with the cobas® PCR Urine Sample Kit .Prior to sampling, the patient should not have urinated for at least one hour. Given that collection or larger volumes of urine may reduce test sensitivity, please direct patient to provide first-catch urine (approximately 10-50 mL of the initial urine stream) into a urine collection cup.	2-30°C	2,500	In Lab	/
C1 Esterase (C1ES) Inhibitor Antigen (Mayo)	N334	10 Days	Nephelometry	19-37 mg/dL	Serum 2 ml	Frozen : stability 28 days	12,500	Out Lab	
C1 Esterase Inhibitor, Functional Assay (Mayo)	N333	12 Days	Enzyme Immunoassay (EIA)	>67% normal (normal) 41-67% normal (equivocal) <41% normal (abnormal)	Serum 2 ml	Frozen: Stability 28 Days	12,500	Out Lab	
C1q complement (Mayo)	T528	10 Days	Nephelometry	12-22 mg/dL	Fasting serum 2 ml	Frozen stability 28 Days	12,500	Out Lab	
C9ORF72 hexanucleotide repeat for frontotemporal dementia [BML]	M484	21 days	PCR flanking region of [GGGGCC] tandem on C9ORF72 area by repeat-primed PCR and detect with capillaries electrophoresis	Normal alleles: <20* GGGGCC repeats Intermediate alleles: 20-29* GGGGCC repeats Penetrance: >29* GGGGCC repeats *Mayo laboratory*	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	22,000	In Lab	
CA125 (plus HE4)(Roche)	N433	1 day	Electrochemiluminescence immunoassay (ECLIA)		Serum 1 ml	2-8 °C	1,380	In Lab	
CADASIL (NOTCH3 gene, exons 2 to 6 and 11)(CGC genetics)	M681	37 days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	20,000	Out Lab	
CADASIL (Notch3 Mutation)(Siriraj)	B043	60 days	polymerase chain reaction (PCR) ใน exons 2-15, 18-20, และ 21-23 แล้วตรวจกรองหาการกลายพันธุ์ (mutation screening) ด้วยเทคนิค denaturing high-performance liquid chromatography (DHPLC) ตามด้วย direct DNA sequencing		EDTA whole blood 10 ml	2-8 °C	6,000	Out Lab	
Cadmium in Blood (ICP-MS)	S255	within 7 days (except check up group maybe longer)	ICP-MS	Less than 5.00 ug/L (ACGIH 2020)	EDTA Whole Blood 1 mL** Sampling time: Not Critical	Store at 2-8 °C	430	In Lab	/
Cadmium in Urine (ICP-MS)	S250	within 7 days (except check up group maybe longer)	ICP-MS	Less than 5.00 ug/g creatinine (ACGIH 2020)	Random Urine 5-10 mL . Sampling time: Not critical	Store at 2-8 °C	380	In Lab	/
Cadmium, Blood (Rama)	V897	9 days	Atomic adsorbent spectrometry	0-5 ug/L, Toxic conc. > 100 ug/L	EDTA blood 3 ml	2-8 °C	480	Out Lab	
Calcitonin	N750	5 days	chemiluminescence	0 - 18.0 pg/mL	serum 1 ml	Frozen : stability 15 days	1,730	In Lab	
Calcium	C100	1 day	Schwarzenbach with o-cresolphthalein complexone		serum 1 ml	2-8 °C	100	In Lab	/
Calcium (24 Hrs Urine)	C410	1 day	Arsenazo III		24-hrs urine in 20-30 ml of 6 mol/L HCl	2-8 °C	100	In Lab	
Calcium (Random Urine)	C411	1 day	Schwarzenbach with o-cresolphthalein complexone		Random urine 5 ml	2-8 °C	100	In Lab	/
Calprotectin (Bumrungrad)	C677	5 Days	N/A		stool	2-8°C	3,200	Out Lab	
CALR exon 9 in/del mutations [BML]	M453	12 days	PCR and direct sequencing for CALR exon 9 insertion/deletion		EDTA whole blood /bone marrow 3-5 mL	2-8°C (stability 7 days)	5,350	In Lab	
Campylobacter culture (CHULA)	P810	11 days	filter membrane processing and culture	-	Stool 5 ml (Sterile container)	2-8 องศา	600	Out Lab	
Campylobacter jejuni IgG (BPL)	P051	2 days	IFA	Negative (<1:100)	Serum 1-2 ml	2-8 °C	1,250	Out Lab	
Campylobacter jejuni IgM (BPL)	P052	2 days	IFA	Negative (<1:10)	Serum 1-2 ml	2-8 °C	1,250	Out Lab	
c-ANCA /Anti-PR3	T510	5 Days	ELISA	< 20 RU/ml negative >= 20 RU/ml positive	serum 1 ml	2-8°C	600	In Lab	
Cancer Antigen 125 (Ovary Cancer)	N430	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	550	In Lab	/
Cancer Antigen 15-3 (Breast Cancer)	N450	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	550	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Cancer Hotspot Mutation Panel (50 genes) + Breast cancer (BRCA1, BRCA2) (Business Alignment, BA)	MM513	32 days	Next generation sequencing (NGS)		6 mL EDTA blood in special kit	2-8 °C	99,000	Out Lab	
Cancer Hotspot Mutation Panel(50 genes) (Business Alignment, BA)	MM514	45 days	Next generation sequencing (NGS)		6 mL EDTA blood in special kit	2-8 °C	82,600	Out Lab	
Candida albicans Antibodies (IgG,IgA,IgM)(Mayo)	N859	18 Days	Enzyme-Linked Immunosorbent Assay (ELISA)	Reference Range: <1.0 Interpretive Criteria: <1.0 Antibody not detected > or = 1.0 Antibody detected	serum 2 ml	Freeze stability 30 days	15,950	Out Lab	
Cannabinoid metabolite [RAMA]	V466	9 days	Gas Chromatography/Mass Spectrometry (GC/MS)	Therapeutic: Not applicable; Reporting limit 2.0 ng/mL Toxic: Not applicable Lethal: Not applicable	Urine (Random,no preservative) 20 mL. Whole blood (NaF or EDTA Blood) 3-5 mL. Serum (No Gel) or Plasma 1 mL.	2-8 °C	3,000	Out Lab	
Cannabinoid(Screening in Gastric)	V856	5 days	color test		Gastric contents 20 ml	2-8oC	590	Out Lab	
Carbamazepine (Tegretol)	V200	1 day	kinetic interaction of microparticles in a solution (KIMS)	Therapeutic range 4 -12 ug/ml	serum 1 ml	2-8 °C	600	In Lab	/
Carbapenem-Resistant Enterobacteriaceae (CRE)(NIH)	E102	30 Days	1. ตรวจยืนยันโดยวิธีชีวเคมี 2. ทดสอบความไวต่อยาปฏิชีวนะ โดยวิธี Kirby-Bauer 3. ทดสอบความไวต่อยาปฏิชีวนะ โดยวิธี E-Test 4. ตรวจหาพันธุกรรม Carbapenem โดยวิธี Multiplex PCR		Colony on Mac plate	Room Temp	2,300	Out Lab	
Carbohydrate Antigen 19-9 (Digestive Tract)	N460	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	550	In Lab	/
Carboxyhemoglobin	A620	18 days	Spectrophotometry		EDTA whole blood 2 ml	Freeze (EDTA whole blood)	440	Out Lab	
Carcinoembryonic Antigen (CEA) (BGH)	N420	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	270	In Lab	/
Cardio IQ(R) Lp-PLA2 Activity (Quest,USA)	C369	15 Days	Enzymatic Assay	≤123 nmol/min/mL	serum 2 ml Fasting preferred, but not required.	Frozen stability 42 Days	17,415	Out Lab	
CardioGenomicPlus™ Profile (Buccal Rinse)(Thai cell Fix)	B111	30 Days			Buccal - Two morning collections of mouthwash rinse (20 ml)	Room temp.	28,430	Out Lab	
Cardiomyopathy hypertrophic (sequence analysis of MYBPC3 gene)(CGC genetics)	M656	67 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	80,000	Out Lab	
Carrier Screening Miniplus Panel (BGI Thailand)	MM548	45 days	1. NGS Additionally, 2. LongPCR, Gap-PCR, qPCR 3. SANGER sequencing 4. TP-PCR and fluorescence capillary gel electrophoresis for Fragile X Syndrome		EDTA Blood 5 ml and Saliva	2-8 oC	22,400	Out Lab	
Carrier Status DNA Insight (ThaiStemLife)	B586	42 Days			Buccal swab (in special test kit)	Read instructions inside package before collecting	34,000	Out Lab	
Catecholamine Fractionation, Plasma, Free (Mayo)	N523	12 Days	High-Performance Liquid Chromatography (HPLC)	NOREPINEPHRINE Supine: 70-750 pg/mL Standing: 200-1,700 pg/mL EPINEPHRINE Supine: < or =111 pg/mL Standing: < or =141 pg/mL DOPAMINE <30 pg/mL (no postural change)	EDTA plasma 5 ml	Frozen : Stability 7 days	19,000	Out Lab	
CD27 [PCT Lab]	A857	5 days	Flow cytometry		EDTA whole blood 3 ml or heparinized bone marrow 3 ml , room temp	room temp	3,130	Out Lab	
CD34 cell count (Wincell)	A114	4 Days	Flow cytometry	N/A	EDTA Blood 3 mLx 2 tubes	1. room temp (stability 6 Hrs) 2. 2-8 °C (Stability 24 Hrs)	2,500	Out Lab	
CD4 & CD3 [BML]	M060	3 days	Flow Cytometry		EDTA Whole Blood 3-5 mL ; Required CBC result with the same specimen.	20-25°C (Send to lab within 30 hours of collection)	750	In Lab	/
CD4 & CD8 & CD3 [BML]	M065	3 days	Flow Cytometry		EDTA Whole Blood 3-5 mL ; Required CBC result with the same specimen.	20-25°C (Send to lab within 30 hours of collection)	1,125	In Lab	/
CD4/CD8 (CSF or BAL)(Rama)	N068	5 days	Flow cytometry	x	CSF or BAL 2-3 ml	2-8 °C	1,730	Out Lab	
CD59(Siriraj)	A856	3 days	Flow cytometry	N/A	Heparinized whole blood 5-6 mL.	room temp, performed within 24 hours	2,070	Out Lab	
CEBPA Gene mutation (Coding sequence analysis) [BML]	M364	10 Days	PCR and direct sequencing for CEBPA coding sequence analysis		EDTA Whole Blood 1 - 3 ml EDTA Bone marrow 1 - 3 mL.	2-8°C	7,650	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
CEBPA Gene mutation in AML by direct sequencing (RAMA)	MM932	21 Days	Direct sequencing		EDTA Whole Blood 1 - 3 ml OR EDTA Bone marrow 1 - 3 ml.	Specimen must be received in the laboratory on the same day as collected(keep Room temp) If necessary, please store at 4 - 8 oC	10,000	Out Lab	
CelFix Organic Acid Profile(Thai cell Fix)	C771	16 days	Gas Chromatography-Mass spectrometry (GC-MS)		First morning urine 30 ml with preservative	Frozen	8,400	Out Lab	
Celiac disease (HLA-DQ2/ HLA-DQ8) (CGC genetics)	M682	37 Days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	22,200	Out Lab	
Celiac Profile	N258	3 days	ELISA	N/A	serum 1 ml	2-8 °C	9,000	In Lab	
CentoArrayCyto 750K(LMGG)	MM783	32 days			EDTA whole blood 6 ml	2-8 °C	53,200	Out Lab	
CentoCancer Panel by WGS (LMGG)	MM632	30 days			EDTA blood 6 ml	2-8 °C	130,200	Out Lab	
CentoDx Plus Solo (LMGG)	MM594	30 days	Next Generation Sequencing		EDTA blood 6 ml	2-8 °C	71,400	Out Lab	
CentoGenome Advance-Solo (LMGG)	MM633	60 days			EDTA blood 6 ml	2-8 °C	273,000	Out Lab	
CentoGenome Advance-Trio (LMGG)	MM634	60 days			EDTA blood 6 ml (Proband) EDTA blood 6 ml (Father and Mother of proband)	2-8 °C	490,000	Out Lab	
CentolCU Platinum(LMGG)	MM070	23 days	NGS		EDTA whole blood 6 ml (New born 2-3 ml)	2-8 °C	83,300	Out Lab	
Centoxome Gold Advance(4 members)(LMGG)	MM788	60 days	NGS (Illumina , Hiseq X Centogene, Germany)		EDTA blood 6 ml.	2-8 °C	182,000	Out Lab	
Centoxome Gold Advance(Solo)(LMGG)	MM789	60 days	NGS (Illumina , Hiseq X Centogene, Germany)		EDTA blood 6 ml.	2-8 °C	91,100	Out Lab	
Centoxome Gold Advance(Trio)(LMGG)	MM790	60 days	NGS (Illumina , Hiseq X Centogene, Germany)		EDTA blood 6 ml.	2-8 °C	154,100	Out Lab	
Centoxome Gold Solo - Advanced with Mitochondrial Genome Analysis (LMGG)	MM787	3 months	Exome sequencing with Mitochondrial Genome Analysis	N/A	EDTA whole blood 6 ml for index case only	4 °C	112,000	Out Lab	
Ceruloplasmin	N585	1 day	Nephelometry	0.2- 0.6 g/L	serum 1 ml or heparin plasma ,EDTA plasma ,(minimum 300 ul)	2-8 °C	400	In Lab	/
CH50 (Hemolytic Complement)(Rama)	N786	7 days	Turbidity	Unit/ml	Serum minimum 500 ul.	Freeze	695	Out Lab	
Chikungunya IgG IFA titer (BPL)	P142	5 days	IFA	Negative (<1:10)	serum 1-2ml	2-8 °C	1,250	Out Lab	
Chikungunya IgM [Rama]	P140	5 days	strip (immunochromatography)		serum 1 ml	2-8 °C	750	Out Lab	
Chikungunya IgM IFA titer (BPL)	P143	5 days	IFA	Negative (<1:10)	serum 1-2ml	2-8 °C	1,250	Out Lab	
Chikungunya IgM screening (NHS)	P141	1 day	Immunochromatography		serum 1 ml	2-8 °C	500	In Lab	
Chikungunya Virus PCR [BML]	M151	3 days	Real-time RT-PCR for NPS1 gene of Chikungunya virus		EDTA plasma or serum 1 mL	2-8°C (Separate plasma within 6 hours of collection)	2,000	In Lab	
Childhood Epilepsy Panel (GeneDx)	M714	3 Month	Using genomic DNA obtained from blood, approximately 512 coding exons and the flanking splice junctions of 48 genes are sequenced simultaneously by massively parallel sequencing (NextGeneration sequencing).12 The sequencing component of the test includes all genes in the table above except for CHRNA7 and MAGI2, since only large deletions have been reported in these genes. The sequence is assembled and compared to published genomic reference sequences. Sanger sequencing is used to compensate for low coverage and refractory amplifications. Concurrently, targeted array CGH analysis with exon-level resolution is performed to evaluate for a deletion or duplication of one or more exons of the 50 genes included on the panel. Note that deletions and duplications of the FOXP1 gene may not be detected by this test. If indicated, multiplex ligation-dependant probe amplification (MLPA) of the FOXP1 gene is available as a separate test (test code 904). The presence of any potentially disease-associated sequence variant(s) or copy number mutation(s) is confirmed by dideoxy DNA sequence analysis or quantitative PCR, respectively, or by other methods as appropriate. If the Childhood Epilepsy Panel is negative, sequencing and deletion/duplication analysis of the remaining 20 genes on the Comprehensive Epilepsy Panel is available as a separate test.		Whole blood in EDTA. Adults: 8-10 ml; Children: 4 ml; Infants: 2 ml.	Blood specimens may be refrigerated for up to 7 days prior to shipping shipment : ambient temperature	220,000	Out Lab	
Chlamydia Antigen screening	P020	1 day	immunochromatography	Negative	Endocervical swab in special kit	2-8 °C	580	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Chlamydia trachomatis IgA	P246	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	1,150	Out Lab	
Chlamydia trachomatis IgG	P257	8 days	ELISA	< 16RU/ml negative >=16 to < 22 RU/ml borderline >= 22 RU/ml positive	serum 1 ml	2-8oC 14 days	630	In Lab	/
Chlamydia trachomatis IgG (Chula)	P247	11 days	MIF (micro-immunofluorescence)	N/A	serum 1 ml (Min.500 ul)	2-8 °C	870	Out Lab	
Chlamydia trachomatis IgM	P258	8 days	ELISA	Ratio <0.8 negative Ratio >=0.8 to <1.1 borderline Ratio >= 1.1 positive	serum 1 ml	2-8oC 14 days	530	In Lab	/
Chlamydia trachomatis IgM (Chula)	P248	11 days	MIF (micro-immunofluorescence)	N/A	serum 1 ml (Min 500 uL)	2-8 °C	870	Out Lab	
Chlamydia pneumoniae IgA (Chula)	P770	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	1,150	Out Lab	
Chlamydia pneumoniae IgG (Chula)	P774	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	870	Out Lab	
Chlamydia pneumoniae IgM (Chula)	P775	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	870	Out Lab	
Chlamydia psittaci IgA (Chula)	P773	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	1,150	Out Lab	
Chlamydia psittaci IgG (Chula)	P771	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	1,300	Out Lab	
Chlamydia psittaci IgM (Chula)	P772	11 days	MIF (micro-immunofluorescence)		serum 1 ml	2-8 °C	1,300	Out Lab	
Chloride	C540	1 day	Indirect ISE		serum 1 ml	2-8oC	65	In Lab	/
Chloride (24 Hrs Urine)	C452	1 day	Indirect ISE		24 hrs-urine (No preservative)	2-8 °C	65	In Lab	/
Chloride (Fluid/Urine)	C745	1 day	Indirect ISE		Body fluid 5 ml or Urine 5 ml	2-8 °C	65	In Lab	/
Chloroform in Blood (HS-GC-MS)	S037	within 5 days(except checkup group)	GC-MS	-No reference range -Reported with Limit of Detection (LODs) only.	EDTA or NaF blood 2 mL	Store at 2-8 °C	400	In Lab	/
Chloroform in Urine (HS-GC-MS)	S080	within 5 days(except checkup group)	GC-MS	-No reference range -Reported with Limit of Detection (LODs) only.	Random urine 5-10 mL	Store at 2-8 °C	440	In Lab	
Cholesterol	C061	1 day	Enzymatic	< 200 mg/dl	serum 1 ml	2-8 °C	80	In Lab	/
Cholinesterase	C055	1 day	DGKC Butyrylthiocholine 37°C1	99-9992879226690/L 99-9993892209280/L	serum 1 ml	2-8 °C	200	In Lab	/
Chromium in Blood (ICP-MS)	S042	within 5 days	ICP-MS	Less than 5.00 ug/L Industrial Chemical Exposure: Guidelines for Biological Monitoring, 2nd edition, 2000	EDTA Whole Blood 1 mL	Store at 2-8 °C	430	In Lab	/
Chromium in Urine (ICP-MS)	S043	within 7 days (except check up group maybe longer)	ICP-MS	Less than 25.00 ug/L (ACGIH 2020)	Random urine 5-10 mL Sampling time:end of shift at end of workweek	Store at 2-8 °C	380	In Lab	/
Chromogranin A (Questdiagnostics)	C705	30 Days	chemiluminescence	Reference Range(s) 25-140 ng/mL	serum 2 ml Minimum Volume 0.5 mL	Specimen Stability Room temperature: 7 days Refrigerated: 7 days Frozen: 14 days	20,700	Out Lab	
Chromogranin A (RAMA)	T526	23 days	ELISA		EDTA Plasma 1 mL	Freeze	1,875	Out Lab	
Chromosomal microarray analysis (array CGH,Cytoscan HD)(CGC genetics)	M606	37 Days	chromosomal microarray analysis using the most comprehensive and robust technology available (CytoScan®, Affymetrix®)		1. EDTA whole blood 3 ml (minimum 1 ml) 2. Extracted DNA 100 ul (concentration 50 ng/mL)	room temp (20-25 °C)	63,000	Out Lab	
Chromosomal microarray for developmental delay, intellectual impairment and ASD(RAMA)	MM516	90 Days	Chromosomal Microarray: CMA		EDTA whole blood 3-6 ml (minimum 3 ml)	- Room temperature (20-25 °C) Stability 1 Day - 4 °C Stability 3 Days	46600.00	Out Lab	
Chromosome Analysis with karyotype in Chorionic Villous Sample (CVS)	B240	30 days	non synchronized culture		Chorionic Villous Sample or Tissue in specific media	2-8 °C	3,700	Out Lab	
Chromosome study (amniotic fluid) no AFP (Chromosome center)	B098	16 days	Cell culture and G-band staining	N/A	Amniotic Fluid 20 ml	room temp	3,800	Out Lab	
Chromosome study (amniotic fluid) no AFP (Medical Genetics Center)	B122	20 Days	Cell culture and G-banding		Amniotic Fluid 20 ml	2-8 °C	2,700	Out Lab	/
Chromosome study (amniotic fluid) no AFP (Nawabutra IVF center)	B011	23 days	Cell culture and G-band staining		Amniotic Fluid 20 ml	4-8 °C	3,450	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Chromosome study (amniotic fluid) with AFP (Medical Genetics Center)	B121	20 Days	Cell culture and G-banding		Amniotic Fluid 20 ml	2-8 °C	3,150	Out Lab	
Chromosome study (Amniotic with AFP)(BCC)	B502	16 days	Cell culture and G-banding		Amniotic fluid 20	Room temp (More than 24 hours 2-8 oC)	2,800	Out Lab	
Chromosome study (Amniotic without AFP)(BCC)	B501	16 days	Cell culture and G-banding		Amniotic fluid 20	Room temp (More than 24 hours 2-8 oC)	3,300	Out Lab	
Chromosome study (Amniotic without AFP)(รพ.ธัญญาพริมา)(BCC)	B601	16 days	Cell culture and G-banding		Amniotic fluid 20	Room temp (More than 24 hours 2-8 oC)	2,800	Out Lab	
Chromosome study (blood) (Medical Genetics Center)	B123	16 Days	Cell culture and G-banding		Heparinized blood 3 ml or cord blood 3-5 ml	2-8 °C	2,000	Out Lab	/
Chromosome study (blood) (Nawabutra IVF center)	B095	12 days	Cell culture and G-band staining	N/A	Heparinized blood 3 ml	2-8 °C	2,500	Out Lab	
Chromosome study (Blood)(BCC)	B503	16 days	Cell culture and G-banding		Heparinized blood 3 ml	Room temp (More than 24 hours 2-8 oC)	1,900	Out Lab	
Chromosome study (Blood)(รพ.ธัญญาพริมา)(BCC)	B600	16 days	Cell culture and G-banding		Heparinized blood 3 ml	Room temp (More than 24 hours 2-8 oC)	2,250	Out Lab	
Chromosome study (blood), leukemia (Chromosome center)	B101	12 days	Cell culture and G-band staining	N/A	Heparinized blood 3 ml	2-8 °C	4,125	Out Lab	
Chromosome study (blood), non-leukemia (Chromosome center)	B102	12 days	Cell culture and G-band staining, Trypsin-Giemsa	N/A	Heparinized blood 3 ml	2-8 °C	3,000	Out Lab	
Chromosome study (bone marrow) (Chromosome center)	B103	12 days	Cell culture and G-band staining	N/A	Heparinized bone marrow 3 ml	2-8 °C within 24hr	4,125	Out Lab	
Chromosome study (bone marrow) (Nawabutra IVF center)	B096	12 days	Cell culture and G-band staining	N/A	Heparinized bone marrow 3 ml	2-8 °C	2,400	Out Lab	
Chromosome study (Microarray Fetal DNA chip) (If no-result report)(NGG)	MM734	16 days	CGH+SNP Microarray (Fetal DNA chip)		1. Placental Tissue/ Products of Conception 30 mg in Special Kit 2. Parental EDTA Blood 3-5 ml in Special Kit	RoomTemperature	15,400	Out Lab	
Chromosome study (Placenta, CVS)(Nawabutra IVF center)	B031	30 days	Cell culture and G-band staining	N/A	Placenta in sterile NSS or CVS in special media (have to asking for the special media at least 2 days before use)	2-8 °C	3,910	Out Lab	
Chromosome study (POC)(NGG)	MM698	16 days	CGH+SNP Microarray (Fetal DNA chip)		1. Placental Tissue/ Products of Conception 30 mg in Special Kit 2. Parental EDTA Blood 3-5 ml in Special Kit 3. Amniotic fluid 30 ml and Parental EDTA Blood 3-5 ml **Parental EDTA Blood must be send together with tissue/amniotic specimen**	RoomTemperature	46,200	Out Lab	
Chromosome study (Tissue)(Chromosome center)	B590	23 Days	Cell culture and G-band staining	N/A	Placenta in sterile NSS or tissue 1x1 Cm. in sterile NSS // If cannot sent within 24 hrs, should be sent on 48 hrs store at 4 C in NSS "DO NOT in formalin" Ms.Paweena 19.11.2015	2-8 °C	3,500	Out Lab	
Chromosome Study (Tissue)(Nawabutra IVF center)	B009	23 days	Cell culture and G-band staining		รก (จากการขูดผนังมดลูก = CVS) หรือ tissue ของทารก เช่น ผังหน้าท้องเด็ก หรือ ขาฉอน แขน	2-8 °C	3,910	Out Lab	
Chromosome study from amniotic fluid (LMGG)	MM607	22 Days	Conventional karyotyping		Amniotic fluid 20 ml in sterile tube	4oC and must be performed within 24 hours	4,600	Out Lab	
Chromosome study from peripheral blood (LMGG)	MM608	18 Days	Conventional karyotyping		Heparinized blood 3-4 ml	4oC and must be performed within 24 hours	3,200	Out Lab	
Chromosome XX,XY (FISH)	B150	8 days	FISH		Heparinized whole Blood 5 ml	2-8 °C	4,440	Out Lab	
Circle Fitness Diet Pro (N Health)	MM301	30 days	Microarray		Buccal swab (special kit)	Room Temperature (20-30oC)	11,100	Out Lab	
Circle Premium (N Health)	MM302	45 days	Whole Exome Sequencing by NGS		Buccal swab (special kit)	Room Temperature (20-30oC)	30,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Circulating cell-free DNA collection tube	M097	-			Procedure for Specimen Collection 1. Ensure that the PAXgene Blood ccfDNA Tube is at room temperature (15–25°C) prior to use and properly labeled with specimen identification. 2. Collect blood into the PAXgene Blood ccfDNA Tube using your institution's recommended procedure for standard venipuncture technique (see Section V. Prevention of Backflow). 3. Ensure that the blood has stopped flowing into the tube before removing the tube from the holder. 4. After blood collection, gently invert the PAXgene Blood ccfDNA Tube 8–10 times. 5. Blood samples filled in PAXgene Blood ccfDNA Tubes are stable at room temperature (15–25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day until centrifugation and plasma processing	Blood samples filled in PAXgene Blood ccfDNA Tubes are stable at room temperature (15–25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day until centrifugation and plasma processing Store the unused PAXgene Blood ccfDNA Tubes at room temperature (15–25°C).	335	In Lab	
Circulating cell-free DNA collection tube(100 tubes)	M099	-			Procedure for Specimen Collection 1. Ensure that the PAXgene Blood ccfDNA Tube is at room temperature (15–25°C) prior to use and properly labeled with specimen identification. 2. Collect blood into the PAXgene Blood ccfDNA Tube using your institution's recommended procedure for standard venipuncture technique (see Section V. Prevention of Backflow). 3. Ensure that the blood has stopped flowing into the tube before removing the tube from the holder. 4. After blood collection, gently invert the PAXgene Blood ccfDNA Tube 8–10 times. 5. Blood samples filled in PAXgene Blood ccfDNA Tubes are stable at room temperature (15–25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day until centrifugation and plasma processing	Blood samples filled in PAXgene Blood ccfDNA Tubes are stable at room temperature (15–25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day until centrifugation and plasma processing Store the unused PAXgene Blood ccfDNA Tubes at room temperature (15–25°C).	33,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Circulating cell-free DNA collection tube(50 tubes)	M098	-			Procedure for Specimen Collection 1. Ensure that the PAXgene Blood ccfDNA Tube is at room temperature (15–25°C) prior to use and properly labeled with specimen identification. 2. Collect blood into the PAXgene Blood ccfDNA Tube using your institution's recommended procedure for standard venipuncture technique (see Section V. Prevention of Backflow). 3. Ensure that the blood has stopped flowing into the tube before removing the tube from the holder. 4. After blood collection, gently invert the PAXgene Blood ccfDNA Tube 8–10 times. 5. Blood samples filled in PAXgene Blood ccfDNA Tubes are stable at room temperature (15–25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day until centrifugation and plasma processing	Blood samples filled in PAXgene Blood ccfDNA Tubes are stable at room temperature (15–25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day until centrifugation and plasma processing Store the unused PAXgene Blood ccfDNA Tubes at room temperature (15–25°C).	16,750	In Lab	
Circulating Tumor Cell Test (CTC)(ThaiStemLife)	T281	9 days	immunomagnetic ally capturing CD146-positive cells from peripheral blood		blood 7.5 ml in special tube (Need to inform the subcontract in advance for Special tube)	room temperature	53,500	Out Lab	
Citrate, 24 hr-urine (BRIA)	C756	26 days	-	320-1240 mg/day	24 Hr-urine (preserved by 20 ml of 6N HCl) 30 mL	2-8 °C or 15-25 °C	4,900	Out Lab	
Citrate, Urine [Siriraj]	D204	9 days	ELISA	ไม่มีค่าปกติ	Random Urine, 24 hr Urine ปริมาตร 30 ml (No preservative or preserved by Sodium azide) Stability 7 Days	2-8 °C Stability 7 Days	1,010	Out Lab	
C-KIT mutation test (RAMA)	MM552	20 Days			"Formalinixed, paraffin-embedded (FFPE) tissue and H&E slide **Pathology report must be attached	Room Temperature	14,140	Out Lab	
c-KIT mutations for leukemia/mastocytosis (exon 8, 11 and 17) [BML]	M478	10 days	PCR and direct sequencing for exon 8, 11 and 17 KIT gene		1. EDTA blood or bone marrow 3-5 mL OR 2. FFPE tissue Dx mast cell leukemia, mastocytosis หากเป็น FFPE ให้ตีพิมพ์ R887 ด้วย	Room temperature (FFPE) EDTA blood or bone marrow (2-8oC)	18,000	In Lab	
c-KIT mutations for mastocytosis (exon17, D816)[BML]	M477	10 days	PCR and direct sequencing for KIT exon 17 (D816 is located on KIT exon 17)		1. EDTA blood or EDTA bone marrow 3-5 mL OR 2. FFPE tissue Dx mast cell leukemia, mastocytosis หากเป็น FFPE ให้ตีพิมพ์ R887 ด้วย	Room temperature for FFPE 2-8oC for EDTA blood or bone marrow	5,000	In Lab	
c-KIT mutations for solid tumor (exons 9, 11, 13 and 17) [BML]	M476	10 days	PCR and direct sequencing for KIT exon 9, 11, 13 and 17		FFPE with appropriate amount of tumor cells especially - GIST - Spindle cell tumor - Spindle cell tumor; compatible with GIST	Room temperature	20,000	In Lab	
CK-MB (BGH)	C094	1 day	Chemiluminescent microparticle immunoassay (CMIA)	F/M 001-9990-48g/mL	serum 1 ml	2-8 °C	400	In Lab	/
Clostridium defficile Culture	E070	30 Days	culture		Stool 8 gm (sterile container)	2-8 oC // คุณเชลจิภา ..แจ้ง12/06/12	1,330	Out Lab	
Clostridium difficile PCR	M351	3 days	Real-time PCR (Taqman probe) for C. difficile toxin A (tcdA) and toxin B (tcdB)		Fresh Stool	2-25°C	1,900	In Lab	/
Clozapine level (Rama)	V140	16 days	LC/MS/MS	Therapeutic 100-600(800); Trough 100-300 ng/mL Toxic 800-1300 ng/mL Letal 3000 ng/mL ----- Norclozapine Therapeutic 100-600 Toxic > 700 ng/mL	Serum 2 ml (DO NOT USE GEL TUBES)	2-8 °C	1,500	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
CMT1A and HNPP (PMP-22)	B091	30 days	Gene dosage analysis	N/A	EDTA whole blood 6-10 ml	2-8 °C	2,400	Out Lab	
CMV Antigen Infected Cells (Chula)	H152	3 days	Fluorescence assay	-	EDTA whole blood 5 ml or Lesions smear on 2 slides, don't fix BAL	room temp BAL at 2-8 C	690	Out Lab	
CMV DNA Detection (Siriraj)	H192	14 Days	Real-time PCR		Body Fluid, CSF, Sputum, BAL, EDTA Plasma 1 ml.	2-8 °C	1,900	Out Lab	
CMV DNA Quantitative	H055	7 days	real time PCR		CSF 1 ml or urine 1 ml or EDTA whole blood 3 ml (EDTA plasma at freeze -80 oC)	2-8 °C	2,530	Out Lab	
CMV IgG IFA titer (CSF) [BPL]	N833	3 days	IFA		CSF 1-2 ml	2-8 °C	1,250	Out Lab	
CMV IgG IFA titer (serum) (BPL)	N831	3 days	IFA	Negative (<1:10)	serum 1-2ml	2-8 °C	1,250	Out Lab	
CMV IgM IFA titer (CSF) [BPL]	N832	3 days	IFA	-	CSF 1-2ml	2-8 °C	1,250	Out Lab	
CMV IgM IFA titer (serum) (BPL)	T111	3 days	IFA	Negative <1:10	serum 1 ml	2 - 8 oC	1,250	Out Lab	
CMV PCR (Qualitative) [BML]	M030	3 days	Real-time PCR		EDTA plasma or serum 1 mL / CSF ≥ 0.5 mL / Aqueous humor 1 mL / Urine 10 mL / Fresh Tissue 1 cm. / Sputum 1 ml (Update : 18/10/2019)	2-8°C (Separate plasma within 6 hours of collection)	1,500	In Lab	
CMV Viral Load [BML]	M102	3 days	COBAS Ampliprep/COBAS TaqMan 48		Serum or EDTA plasma 2 mL	2-8°C (Separate serum or EDTA plasma within 24 hours of collection)	5,000	In Lab	/
CMV Viral Load [Chula]	H027	5 days	PCR	N/A	EDTA plasma 2 ml	Freeze	3,200	Out Lab	
CMV Viral Load [Rama]	H025	5 days	real time PCR (Amplicor)		EDTA plasma 2 ml or CSF/Fluid 1 ml or urine 5 ml , perform immediately or Rectal swab in VTM for influ	Plasma/ Fluid ; Freeze urine ; transport at 2-8 °C, do not freeze	3,220	Out Lab	
Cobalt (Urine)	V603	21 days	GF-AAS		urine 30 ml	2-8oC	420	Out Lab	
Cobalt in Blood (ICP-MS)	S044	within 7 days	ICP-MS	Less than 1.00 ug/L (ACGIH 2014)	EDTA Whole Blood 1 mL Sampling time :end of shift at end of workweek	Store at 2-8 °C	500	In Lab	/
Cobalt in Urine (ICP-MS)	S045	within 7 days (except check up group maybe longer)	ICP-MS	Less than 15.00 ug/L (ACGIH 2020)	Random urine 5-10 mL Sampling time :end of shift at end of workweek	Store at 2-8 °C	440	In Lab	/
Cocaine (KIMS)	V741	1 day	kinetic interaction of microparticles in a solution (KIMS)		Random urine 5 ml	2-8 °C	500	In Lab	/
Cocaine(Screening in Gastric)	V858	5 days	color test	N/A	Gastric contents 20 ml	2-8 °C	1,010	Out Lab	
Cocaine/Metabolites (GC/MS)(Rama)	V807	9 days	Gas Chromatography/Mass Spectrometry (GC/MS)	Therapeutic: Not applicable Toxic: Not applicable Lethal: Not applicable	Serum 2 ml (No gel) or urine 30 ml	2-8 °C	2,100	Out Lab	
Coenzyme Q10 (HPLC)	S010	within 7 days	HPLC	400-1,600 µg/L	Serum 1 ml	Light protected at 2-8 °C	3,200	In Lab	
Coffin-Siris syndrome(sequence analysis of ARID1A gene)(CGC genetics)	M693	67 days	Sanger		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25°C)	94,000	Out Lab	
Coffin-Siris syndrome(sequence analysis of ARID1B gene)(CGC genetics)	M694	67 days	Sanger		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	94,000	Out Lab	
Cold Agglutinin	T030	6 days	Hemagglutination tube test		serum 1-2 ml (room temp)	room temperature	290	Out Lab	
Collagen Binding Activity(CBA)(Siriraj)	A632	11 days	ELISA	N/A	Citrate plasma 1 ml	Freeze	750	Out Lab	
Colony count (Membrane filter method) (Chula)	E530	16 days	total plate count		water > 100 ml (minimum 100 ml.)	2-8 °C	700	Out Lab	
Colony count (Spread method)	E531	16 days	total plate count		water > 100 ml	2-8 °C	520	Out Lab	
Common 10 Genetic Carrier Screening (For Preconception and Early pregnancy) (LMGG)	MM507	23 days	Molecular technique for each condition (Please see in attached file)		EDTA whole blood 3 mL x 3 tubes	2-8-C	39,200	Out Lab	
Complement C3 (B1C)	T430	2 days	Nephelometry	90 - 180 mg/dl	serum 1 ml	2-8 °C	300	In Lab	/
Complement C4	T440	2 days	Nephelometry	10 - 40 mg/dl	serum 1 ml (no hemolysis)	2-8 °C	300	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Complete Blood Count	A010	1 day	1. จำนวน RBC ทั้งหมดที่นำไปตรวจวัดใน RBC/HGB sample chamber จะเป็นจำนวนเซลล์เท่าไรขึ้นกับจำนวน RBC ของแต่ละสิ่งส่งตรวจใน ปริมาตรเลือด 4 uL ที่ถูกเจือจางด้วย Cellpack DCL 2000 uL แล้ววัดดู ไปวัด 9.3 uL (คิดเป็น Dilution ratio 1:498.168) ตัวอย่าง คนไขรายหนึ่งมีค่า RBC 5,000,000 cells/uL แสดงว่ามี จำนวน RBC ถูกนำไปตรวจวัดใน RBC/HGB sample chamber จำนวน = (5,000,000 x 9.3)/498.168 = 93,342 cells การวัดเม็ดเลือดแดงและเกร็ดเลือดด้วยหลักการ Hydrodynamic Focusing Direct Current Method เมื่อตัวอย่างเลือดผ่านเข็มเจาะเลือด 88 uL จะถูก Whole blood 4 uL (Exact sample volume dispensed = 4.022784 uL) เข้ามาใน RBC/HGB sample chamber และถูกผสมด้วยน้ำยา Cellpack DCL 2,000 uL เพื่อเจือจางเลือดและคงรักษาสภาพเซลล์เม็ดเลือดแดงกับ เกร็ดเลือดให้มีรูปร่างใกล้เคียงกับเมื่ออยู่ในกระแสเลือดหรือเรียกว่า "Near Native State" เมื่อเลือดที่ถูกเจือจางแล้วนี้ (Dilution ratio 1:498.168) จะถูกวัดปริมาตร 9.3 uL ไปยังห้องนับเม็ดเลือดแดงและ เกร็ดเลือด ที่เรียกว่า RBC/PLT Detection Chamber or Channel การวัดค่าฮีโมโกลบินด้วยหลักการ SLS-Hemoglobin Method		EDTA Blood 2 ml	2-8 °C stability 24 hrs	90	In Lab	/
Complete Diagnostic for Thalassemia (ATGenes)	M919	23 Days	CBC+Hb typing + DNA test		3-6 mL EDTA blood	2-8 °C	10,300	Out Lab	
Complete mitochondrial DNA sequencing(CGC genetics)	MM741	67 Days	NGS		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	64,130	Out Lab	
Comprehensive Carotenoids (HPLC)	S502	within 5 days	HPLC	Lutein & Zeaxanthin 0.15 - 0.92 µmol/L (85 - 523 µg/L) β-Cryptoxanthin 0.05 - 0.5 µmol/L (28 - 276 µg/L) Lycopene 0.1 - 1.25 µmol/L (54 - 671 µg/L) α-Carotene 0.02 - 0.34 µmol/L (11 - 183 µg/L) β-Carotene 0.1 - 1.1 µmol/L (54 - 591 µg/L)	Serum 2 mL	Light protected at 2-8 °C	2,000	In Lab	
Comprehensive Carrier Screening (301 genes) (Invitae; USA)	MM578	23 Days	NGS		EDTA Blood 6-10 ml + Request form + Clinical history Use the Invitae special kit only (same as M963)	Room temperature 48 hr 2-8 °C one week	23,345	Out Lab	
Comprehensive Digestive Stool Analysis Level 2 (BioStem)	C787	23 days	N/A		stool in special kit	2-8 °C	17,500	Out Lab	
Comprehensive Digestive Stool Analysis Level 3+ (BioStem)	C852	23 days	N/A		stool in special kit	2-8 °C	25,900	Out Lab	
Comprehensive markers for myeloproliferative neoplasms (JAK2, CALR, MPL) [BML]	M363	10 DAYS	Real-time PCR (Taqman Probe) for JAK2V617F mutation PCR and direct sequencing for JAK2 Exon 12 mutation, CALR exon 9 insertion/deletion and MPL exon 10 mutation		EDTA Blood 3-5 mL, EDTA bone marrow > 500 uL	EDTA Blood and EDTA bone marrow should be shipped cooled (2-8°C)	11,340	In Lab	
Comprehensive Melatonin Profile (Thai cell Fix)	C722	17 days			3 saliva samples (5ml) collected over a 24-hour period (frozen)(Subcontractor Special KIT)	x	14,970	Out Lab	
Comprehensive metabolic test (Siriraj)	C953	11 days	GC/MS		Blood in filter paper (6 drops)	Room temp within 7 days	5,000	Out Lab	
Comprehensive Prevention for couple at risk assessment package (Alpha and Beta-thalassemia) (ATGenes)	MM619	12 days	PCR		EDTA whole blood 3 ml for each individual (one husband + one wife)	2-8°C	12,600	Out Lab	
Comprehensive Prevention thalassemia (Alpha and Beta-thalassemia) (ATGenes)	MM617	12 days	PCR		EDTA whole blood 3 ml	2-8°C	7,700	Out Lab	
Comprehensive Thyroid Assessment (Thai cell Fix)	C723	21 Days			4ml serum (frozen) in transfer tubes from SST	frozen	18,820	Out Lab	
Comprehensive Urine Elements Profile (Timed or 24-hour) (Urine)(Thai cell Fix)	V707	14 Days			2 tubes of urine, 15ml each	x	16,070	Out Lab	
Congenital Central Hypoventilation (PHOX2B polyalanine repeat) (LMGG)	MM520	25 Days			EDTA blood 6 ml. (minimum 3 ml.)	4°C	6,300	Out Lab	
Congenital Thrombophilia Factor	B160	16 Days			EDTA whole blood 5 ml	2-8 °C	3,750	Out Lab	
Copper (24 hr-urine) (RAMA)	V608	9 days	Flame AAS	0-80 ug/L or 3-35 ug/day	urine 24 hours , no preservative 50 mL	2-8 °C	520	Out Lab	
Copper (Blood)(BOMC)	V607	11 days	Frame AAS	70-160 µg/dl	serum 2 ml (minimum 1 ml)	2-8 °C	500	Out Lab	
Copper (Urine)(BOMC)	V606	16 days		< 50 ug/g creatinine	uine 20 ml	2-8 °C	500	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Copper in 24-h Urine (ICP-MS)	S305	within 7 days (except check up group maybe longer)	ICP-MS	15-36 ug/day R. R. Lauwerys and P. Hoet "Industrial Chemical Exposure: Guidelines for Biological Monitoring" 2nd ed. p. 51	24 hour urine 5-10 mL. ** No preservative & Record total volumn**	Store at 2-8 °C	500	In Lab	/
Copper in Blood (ICP-MS)	S047	within 5 days	ICP-MS	794.00 - 2023.00 ug/L Forensic Science International 153(2005)39-44.	EDTA plasma 1 mL.	Store at 2-8 °C	500	In Lab	/
Copper in Blood (RAMA)	V644	5 days (ยกเว้นกรณีที่เป็น check up ต้อง ดกกลงกันเป็นแต่ละ groupไป)	GFAAS		serum 2 ml	2-8 °C	520	Out Lab	
Copper in Liver (ICP-MS)	S310	17 days	ICP-MS	15.00-55.00 ug/g dry liver weight	Liver tissue 10-20 mg in new plastic bottle.	Store at 2-8 °C .	3,000	In Lab	
Copper in Urine (ICP-MS)	S046	within 7 days (except check up group maybe longer)	ICP-MS	4.30 - 12.10 ug/L Forensic Science International 153(2005)39-44	Random urine 5-10 mL	Store at 2-8 °C	480	In Lab	/
Coronavirus 2012 (MERS-CoV) PCR (NIH)	H144	3 days	RT PCR		throat swab (in Flu VTM), Nasopharyngeal aspirate or swab (in Flu VTM)	2-8oC	2,500	Out Lab	
Corproporphyrin (RAMA)	V560	6 days	Spectrophotometry		random urine 50 ml , protected from light	2-8 °C	380	Out Lab	
Cortisol (Blood)	N530	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	350	In Lab	/
Cortisol (single tube saliva) (Biostem)	N977	23 days			saliva 5 ml in collecting kit (1 tube)	2-8 °C (Do not Frozen),stability 5 days.	3,500	Out Lab	
Cortisol profile,Salivary (Biostem)	N261	23 Days	N/A	N/A	1. Saliva(4 tubes) collection kits 2. Collect saliva at 8.00am, 12noon , 4.00pm , 8.00pm	2-8 °C (Do not Frozen),stability 5 days.	5,650	Out Lab	
Cortisol, Free and Total, LC/MS/MS (Quest diagnostic)	N507	16 Days	Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS), Equilibrium Dialysis		Serum 2 ml Minimum Volume 0.7 mL	Frozen	20,500	Out Lab	
Corynebacterium diphtheriae Culture	E445	16 days	culture		Pure colony or Throat swab in Stuart' s media (Remark Corynebacterium diphtheriae Culture)	room temp	750	Out Lab	
Coumadin (Warfarine,Orfarin)(Rama)	V415	11 days	HPLC		Serum 3 ml (minimum volume 2 ml)	2-8 °C	580	Out Lab	
COVID-19 (SARS-CoV-2) IgG/IgM (Rapid test)(Immunochromatography)	P154		Immunochromatography	-		2-8oC 3 days	700	In Lab	
COVID-19 (SARS-CoV-2) Total Antibody (Rapid test)(Immunochromatography)	P155	1 hour	Immunochromatography	-	serum 1 ml/(กรณีที่ไม่สามารถขึ้นแยก serum ได้ให้ส่งภายใน 8 ชั่วโมง)	2-8oC 7 days	700	In Lab	
Cow's Milk Precipitin Test	J225	11 days	double immunodiffusion		serum 1 ml	2-8 °C	950	Out Lab	
Coxsackie A antibody	P781	21 days	micro NT (micro -Neutralization)	-	paired serum 1 ml (collected 14 days apart)	2-8 °C	640	Out Lab	
Coxsackie B antibody	P782	21 days (นับจากวันที่ส่ง paired serum ครบ)	micro NT (micro -Neutralization)	-	paired serum 1 ml (collected 14 days apart)	2-8 °C	640	Out Lab	
C-Peptide Level	P260	2 days	chemiluminescence	0.9 -7.1 ng/ml	serum 1 ml (fasting)	2-8oC	1,200	In Lab	/
C-Peptide Level (Chula)	P261	5 days	chemiluminescence		fasting serum 1 ml	2-8 °C	580	Out Lab	
CPK Isoenzyme (BRIA)	C089	30 days	Electrophoresis		serum 2 ml	2-8 °C	7,700	Out Lab	
CPK(Creatine Kinase) (BGH)	C090	1 day	NAC (N-acetyl-L-cysteine)	15-220 U/L	serum 1 ml (no hemolysis)	2-8 °C	200	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Craniosynostosis(NGS panel for 30 genes)(CGC genetics)	M702	67 Days			1. EDTA whole blood 3 ml (minimum 1 ml) or 2. Extracted DNA 100 ul (concentration 50 ng/mL) or 3. Amniotic Fluid in sterile tubes (1 mL per pregnancy week) or 4. CVS (10-30 mg CVS collected in medium with RPMI+FBS+antibiotics)	Room temp. (20-25 °C)	154,950	Out Lab	
C-Reactive Protein High Sens.	P205	1 day	Particle enhanced immunoturbidimetric assay		serum 1 ml	2-8 °C	200	In Lab	/
Creatinine	C520	1 day	Enzymatic method	F/M0-0.0590.310.88mg/dL F/M0.060-10.20.4mg/dL F/M2-50.40.6mg/dL FB-100.40.7mg/dL F01-140.50.8mg/dL F05-200.60.9mg/dL F01-9990.550.02mg/dL M0-100.50.7mg/dL M01-140.50.8mg/dL M05-200.60.9mg/dL M01-9990.730.18mg/dL	serum 1 ml	2-8 °C	60	In Lab	/
Creatinine (24 Hrs Urine)	C460	1 day	Enzymatic method		24 hrs-urine (no preservative)	2-8 °C	65	In Lab	/
Creatinine (plus eGFR)	C521	1 day	Enzymatic method	F/M0-0.0590.310.88mg/dL F/M0.060-10.20.4mg/dL F/M2-50.40.6mg/dL FB-100.40.7mg/dL F01-140.50.8mg/dL F05-200.60.9mg/dL F01-9990.550.02mg/dL M0-100.50.7mg/dL M01-140.50.8mg/dL M05-200.60.9mg/dL M01-9990.730.18mg/dL	serum 1 ml	2-8 °C	60	In Lab	/
Creatinine (Random Urine)	C413	1 day	enzymatic method		Random urine 5 ml	2-8 °C	65	In Lab	/
Creatinine Clearance	C455	1 day	Enzymatic method	1.0 – 1.6 g/24 hrs	serum 1 ml and 24 hrs-urine (no preservative)	2-8 °C	200	In Lab	
Crigler-Najjar (UGT1A1)(Siriraj)	B049	60 days	polymerase chain reaction (PCR) ใน 5 exons และ บริเวณ Promoter ของยีน UGT1A1 อีก 2 ตำแหน่ง (TATA box และ -3263) ตามด้วย direct DNA sequencing		EDTA whole blood 6 ml	1. ควรนำส่งเลือดถึงห้องปฏิบัติการภายใน 24 ชม. หลังเจาะเลือด โดยไม่ต้องแช่เย็น 2. ถ้าส่งไม่ทันภายในวันเดียวกันให้แช่ตู้เย็นที่ 4 °C (ห้ามแช่แข็ง) แล้วส่งวันรุ่งขึ้น	6,250	Out Lab	
Crigler-Najjar (Chula)	M773	18 Days	PCR Sequencing		EDTA Whole Blood 3 ml.	1. Sent to subcontract within 24 hrs at room temp 2. If more than 24 hrs, keep at 2-8 oC	6,250	Out Lab	
Crosslinks (Pyridinoline and Deoxypyridinoline) in Urine (HPLC)	S315	within 10 days	HPLC	Pyridinoline: Male = 23.00 - 65.00 umol/mol creatinine Female = 25.00 - 83.00 umol/mol creatinine Deoxypyridinoline: Male = 6.00 - 26.00 umol/mol creatinine Female = 6.00 - 23.00 umol/mol creatinine	Random urine(Morning's second void) 10-20 mL.	Light protected at 2-8 °C .	4,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Crosslinks in 24 hr.Urine(Pyridinoline and Deoxypyridinoline) (HPLC)	S317	within 10 days	HPLC		24 hour urine 10-20 mL. **No preservative & Record total volume.**	Light protected at 2-8 °C .	4,200	In Lab	
Cryoglobulin (RAMA)	P255	23 days	Precipitation		serum 2 ml (minimum 1.5 ml),OR clott blood 6-10 ml should be stored 37 oc (refrigerated clotted blood is unacceptable)	room temp	410	Out Lab	
Cryptococcal Antigen	P250	2 days	Latex agglutination	Negative	serum or CSF 1 ml	2-8 °C	350	In Lab	
CSF Amino acids	C989	16 days	HPLC		CSF 2 ml (minimum 1 ml)	Frozen	5,180	Out Lab	
CSF3R gene mutations (Exon 14 and Exon 17) [BML]	M397	10 DAYS	PCR and direct sequencing of CSF3R exon 14 and exon 17		EDTA blood 3-5 ml EDTA bone marrow 3 ml (+CBC result)	Room temperature	4,630	In Lab	
CTD Screening for ANA Profile (14 Antibodies) (EliA)	T067	1 day	Fluoro-enzyme Immunoassay (FEIA)	Negative	Serum 2 ml	2-8 °C	1,540	In Lab	
CTNNB1 mutation(Exon 3)(Chula genepro)	MM955	16 days	Pyrosequencing of phosphorylation domain of beta-catenin (CTNNB1) (Codon 30-48)		FFPE Block (This block have carcinoma cells) + H & E Slide + Pathology report	Room temperature	6,000	Out Lab	
Cyanide (Blood)(BOMC)	V485	16 days	UV-VIS (Ultraviolet Visible spectrophotometry)	Exposed person <0.5 ug/mL	NaF whole blood 3 ml	2-8 °C stability 5 days	570	Out Lab	
Cyanide (Screening in Gastric)	V859	3 days	color test	N/A	Gastric contents 20 ml	2-8 °C	450	Out Lab	
Cyanide (Urine)(BOMC)	V486	16 days	UV vis	Normal person < 0.11 mg/L, Exposed person < 10 mg/L	urine 30 ml	2-8 °C	570	Out Lab	
Cyclohexane in Blood(HS-GC-MS)	S101	within 5 days(except checkup group)	GC-MS	< 0.35 mg/L	NaF or EDTA whole Blood 2 mL.	Store at 2-8 °C	550	In Lab	
Cyclohexane(Urine)(BOMC)	V656	16 days	GC-FID	< 5.5 mg/L	uine 20 ml	2-8 °C	400	Out Lab	
Cyclohexanone (Urine)(BOMC)	V076	16 days	GC-FID	Non exposed < 8 mg/L , Biological Exposure Indices Adopted by American Conference of Governmental Industrial Hygienists (ACGIH) 2012	Random uine 20 ml	2-8 °C	390	Out Lab	
Cyclosporin	V325	1 day	Competition principle		EDTA blood 2 ml	2-8 °C	1,500	In Lab	/
CYFRA 21-1	N455	1 day	Electrochemiluminescence immunoassay "ECLIA"	0.0 - 3.3 ng/ml	Serum 1 ml	Serum is stable for 4 weeks at 2-8 C , 6 months at -20 C	1,000	In Lab	
Cystatin C	N361	1 day	Nephelometry	0.53 - 0.95 mg/L	serum 1 ml	2-8 oc	550	In Lab	
Cystic Fibrosis (deletions/duplication analysis on CFTR gene)(CGC genetics)	M655	37 Days	MLPA		EDTA whole blood 3 ml	Room temp. (20-25 °C)	29,200	Out Lab	
Cystic Fibrosis (F508Del-CFTR mutation)(CGC genetics)	M652	37 days	Sanger		EDTA whole blood 3 ml	Room temp. (20-25 °C)	12,000	Out Lab	
Cystic Fibrosis (sequence analysis of CFTR gene)(CGC genetics)	M653	52 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	67,620	Out Lab	
Cystic fibrosis 139 mutations (LMGG)	M976	23 days	NGS		Adult: EDTA whole blood 6 ml, Children (less than 8 years) : EDTA whole blood 3 ml	2- 4° C	29,000	Out Lab	
Cystic Fibrosis Screen [Questdiagnotic]	B438	30 days	Polymerase Chain Reaction and Oligonucleotide Ligation Assay	Reference Range(s) See Laboratory Report	EDTA Whole blood 5 mL	Room temperature	33,000	Out Lab	
Cysticercosis Antibody(Rama)	P897	4 days	EIA		Serum 1-2 mL or CSF 3-5 mL.	2-8 °C	700	Out Lab	
Cysticercosis Antibody(Tropmed)	P265	16 days	immunoblot		serum or CSF	2-8 °C	750	Out Lab	
Cysticercus Ab [Siriraj]	P906	11 days	ELISA		Serum 2 ml	2-8 °C Stability 7 days Freeze -20°C Stability 30 days	2,200	Out Lab	
Cytochrome P450 (6 alleles of CYP2D6, CYP2C9, CYP2C19 and CYP3A4)(CGC genetics)	M657	37 Days	CYP2D6*4, CYP2C9*2, CYP2C9*3, CYP2C19*2 and CYP3A4*1B alleles were screened by PCR-RFLP and CYP2C19*17 allele by PCR amplification and direct sequencing.		EDTA whole blood 3 ml	Room temp. (20-25 °C)	30,240	Out Lab	
Cytomegalovirus IgG	N675	2 days	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	400	In Lab	/
Cytomegalovirus IgM	N680	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	400	In Lab	/
Cytomegalovirus Isolation	P719	23 days	Cell culture isolation&identification		Nasopharyngeal aspirate (in VTM) or Bronchial wash (in VTM) or urine (in sterile container , no VTM)or CSF or BAL	2-8 °C	1,460	Out Lab	
Dabigatran level (Chula)	V717	5 days	chromogenic assay		Citrate plasma 2 ml in plastic tube	Frozen	2,125	Out Lab	
DCIP	A785	2 days	DCIP Precipitation		EDTA blood 1 ml	2-8 °C	150	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
DCP (Des-Gamma-Carboxy-Prothrombin) (Quest diagnostics)	N506	16 Days	Immunoassay	DCP: ≤7.5 ng/mL	Serum 2 ml Red-top (no gel) (preferred) Minimum Volume 0.5 mL	Frozen : stability 21 Days	32,500	Out Lab	
Deafness (Cx 26) Mutation	B400	1 month	PCR of exon 2 (in GJB2 gene) and direct DNA sequen	-	EDTA whole blood 6-10 ml (minimum 5 ml)	2-8 °C	3,700	Out Lab	
Deamidated Gliadin Peptide IgA	N251	3 days	ELISA	0.0 - 25.0 RU/mL	serum 1 ml	2-8 °C	2,700	In Lab	
Deamidated Gliadin Peptide IgG	N252	3 days	ELISA	0.0 - 25.0 RU/mL	serum 1 ml	2-8 °C	2,700	In Lab	
Dehydroepiandrosterone (LC-MS/MS)	S197	Within 10 days	Liquid chromatography tandem mass spectrometry (LC-MS/MS)	As the attached file in Example Lab Report	Serum 1 mL	Store & transport at 2-8 °C	1,700	In Lab	
Dehydroepiandrosterone Sulphate(DHEAS)(Architect)	N320	1 day	Chemiluminescent microparticle immunoassay (CMIA)		Serum 1 ml	2-8oC	450	In Lab	
Dehydroepiandrosterone Sulphate(DHEAS)(Immulite)	N322	2 days	Chemiluminescent microparticle immunoassay (CMIA)	Classified by gender and age	Serum	2-8oC	450	In Lab	/
Dengue (1-4) Ab,IgG&IgM (Type Specific,Titer) (BPL)	P039	3 days	IFA	Negative (<1:10)	Serum or CSF 1-2 ml	2-8 °C	4,000	Out Lab	
Dengue IgG(ELISA)(Chula)	P308	11 days	ELISA		serum 1 ml (minimum 100 uL)	2-8 °C	1,850	Out Lab	
Dengue IgG/IgM (ELISA) [chula]	P857	11 days	ELISA	รายงานผล = ELISA unit IgG and IgM	serum 1 ml (minimum 100 ul for both items)	2-8 °C	3,700	Out Lab	
Dengue IgM(ELISA)(Chula)	P309	11 days	ELISA		serum 1 ml (minimum 1 ml)	2-8 °C	1,850	Out Lab	
Dengue NS1 Antigen	P310	1 day	Immunochromatography		serum 1 ml	2-8 °C	800	In Lab	
Dengue PCR (RNA) [BML]	M150	1 days	Multiplex Real-time RT-PCR		EDTA plasma or serum 1 mL CSF ≥ 0.5ml ***หากต้องการส่ง CSF โปรดติดต่อ BML ก่อนทุกครั้ง***	2-8°C (Separate plasma within 6 hours of collection)	1,800	In Lab	/
Dengue virus IgG/ IgM screening	P855	1 day	Immunochromatography		serum 1 ml	2-8 °C	440	In Lab	
Detection by FISH of frequent aneuploidies (chrs 13, 18, 21, X and Y)(CGC genetics)	M683	9 Days	Fluorescence In Situ Hybridization (FISH)		Amniotic fluid (1ml per pregnancy week, collected in sterile tubes)	Room temp. (20-25 °C)	17,700	Out Lab	
Detection of frequent aneuploidies(QF-PCR)(CGC genetics)	M667	9 Days	QF-PCR		1. EDTA whole blood 3 ml 2. Extracted DNA 100 ul (concentration 50 ng/mL) 3. Amniotic Fluid in sterile tubes (1 mL per pregnancy week) or 4. CVS (10-30 mg CVS collected in medium with RPMI+FBS+antibiotics)	Room temp. (20-25 °C)	17,320	Out Lab	
DetoxiGenomic® Profile (Buccal swab)(Thai cell Fix)	B058	23 Days			Buccal swab in special kits	Room temp.	39,480	Out Lab	
Diaminoxidase levels, DAO (Biovis)	C464	21 days	ELISA	DAO < 3 kU/l Indication of histamine intolerance or pseudo-allergy DAO 3-10 kU/l Grey area DAO > 10 kU/l Histamine intolerance or pseudoallergy unlikely	serum 2 ml	room temp(18-22°C)	10,500	Out Lab	
Dichloromethane [Reference toxico]	V791	21 days	GC/MS		urine 20 ml	2-8 °C	600	Out Lab	
Dichloromethane in Blood (HS-GC-MS)	S035	within 5 days(except checkup group)	GC-MS	0.00 - 0.50 mg/L Deutsche Forschungsgemeinschaft (DFG) (2018)	EDTA or NaF blood 2 mL	Store at 2-8 °C	500	In Lab	/
Dichloromethane in Urine (HS-GC-MS)	S307	within 5 days(checkup group maybe longer)	GC-MS	0.00 - 0.30 mg/L (ACGIH 2020)	Random Urine 5-10 mL (End of shift)	Store at 2-8 °C	500	In Lab	
Digoxin	V210	1 day	kinetic interaction of microparticles in a solution (KIMS)		serum 1 ml	2-8 °C	450	In Lab	/
Dihydrotestosterone (DHT) [RAMA]	N321	20 days	Enzyme Immunoassay	Male: 250-990 pg/mL Female: Premenopausal :24-368 pg/mL Postmenopausal :10-181 pg/mL	Clotted blood 3-5 mL, Serum 1-2 ml	2-8°C (3-4 days) -20 °C (1-2 week)	2,000	Out Lab	
Direct Coombs Test-DAT-CENTBLOOD	L080	1 day	Column Agglutination		EDTA blood 3 ml	2-8 °C	200	In Lab	/
Direct Sequencing of BCR/ABL mutation(drug resistance) [Siriraj]	A884	60 days	PCR Direct Sequencing		EDTA blood 12 ml	2-8 °C	12,750	Out Lab	
Disease exome by CGC Genetics(CGC genetics)	M684	97 Days			1. EDTA whole blood 3 ml (minimum 1 ml) or 2. Extracted DNA 100 ul (concentration 50 ng/mL) or 3. Amniotic Fluid in sterile tubes (1 mL per pregnancy week) or 4. CVS (10-30 mg CVS collected in medium with RPMI+FBS+antibiotics)	Room temp. (20-25 °C)	146,560	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
DMD&BMD [Siriraj]	B211	42 Days	MLPA(multiple ligation-dependent probe amplification)		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	5,750	Out Lab	
DMD&BMD for Male [Rama]	B212	23 days			EDTA whole blood 3 ml	2-8 °C	3,450	Out Lab	
DMRV (GNE) Mutation	B417	2 months	Polymerase chain reaction (PCR) and direct DNA sequencing	-	EDTA blood 6-10 ml	2-8 °C	17,250	Out Lab	
DNA analysis for 5-Alpha Reductase Deficiency, 5-ARD (SRD5A2 gene)(Siriraj)	MM774	2 months	PCR and direct sequencing		EDTA whole blood 10 ml + Request form + Clinical history	2-8°C 3 days	9,425	Out Lab	
DNA Fingerprint for bone marrow transplantation (Rama)	B145	16 days	Fluorescent based PCR technique using capillary electrophoresis		EDTA whole blood 5 ml or bone marrow(in any anticoagulant) 5 ml	2-8 °C	5,750	Out Lab	
DNA For Alpha Globin Gene	A635	23 days	PCR		EDTA whole Blood 5 ml	2-8 °C	2,750	Out Lab	
DNA for Beta Globin Gene [Chula]	A205	23 days	PCR		EDTA whole Blood 5 ml	2-8 °C	4,400	Out Lab	
DNA HEREDITARY CANCER RISK from BLOOD (98 genes 25 hereditary cancers) (Rapport/CellMax Life)	MM543	1 month			EDTA Blood Collection Kit	Store at ambient temperature (18-25° C) ** Do NOT refrigerate or freeze**	25,900	Out Lab	
DNA Mitochondria Mutation for KSS/CPEO (Siriraj Hospital)	B120	4 weeks	PCR		EDTA whole blood 5 ml	2-8 °C	5,250	Out Lab	
DNA Mitochondria Mutation for LHON	B110	42 Days	PCR Sequencing		EDTA whole blood 5 ml	2-8 °C	3,450	Out Lab	
DNA Mitochondria Mutation For MELAS, MERRF, NARP (Siriraj Hospital)	B125	4 weeks	PCR		EDTA whole blood 5 ml	2-8 °C	3,450	Out Lab	
Donor blood screening (PCR for HIV, HBV, HCV)	M505	1 days	Real-time PCR (Taqman probe) for HCV 5'UTR, HIV LTR and HBV polymerase gene		EDTA plasma 1 mL,	2-8°C (Separate plasma within 6 hours of collection)	4,500	In Lab	
Dopamine (Chula)	C945	16 days	HPLC		24 Hr Urine (preserved by 12.5 ml of 6N HCl) 50 ml	2-8 °C	1,100	Out Lab	
Drug Analysis (Quantitative) [RAMA]	V001	11 days	LC/MS/MS		Serum 2 ml (DO NOT USE GEL TUBES)	2-8 °C	3,500	Out Lab	
Drugs of Abuse Panel (Urine)[RAMA]	V467	14 days	GC/MS = Gas Chromatography / Mass Spectrometry LC/MS/MS = Liquid Chromatography / Tandem Mass Spectrometry		Urine (Random,no preservative) 50 mL. **minimum volume = 30 ml**	2-8 °C	8,500	Out Lab	
Dysferlinopathy (Dysferlin) [Siriraj]	B545	4 months	polymerase chain reaction (PCR) and direct DNA sequencing		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	24,000	Out Lab	
E histolytica Antibody (BRIA)	P852	3 days	PHA	-	serum 1 ml	2-8 °C	800	Out Lab	
E.coli(Enterohemorrhagic)DNA [Siriraj]	MM984	5 days	PCR		Stool in sterile container	2-8 °C	3,075	Out Lab	
E.histolytica PCR (TropMed)	T511	11 days	PCR	-	stool or Liver abscess or Liver biopsy Brain abscess or Brain biopsy	2-8 °C (Stabilit 14 days)	3,000	Out Lab	
E1 Metabolites(2,4,16 OH)(Urine) [Biostem]	N791	23 days			first morning urine (random) or 24 hour-urine(no preservative) 10 ml	2-8 °C	8,400	Out Lab	
EBV DNA Detection [Siriraj]	H190	14 Days	Real-time PCR		Body Fluid, CSF, Sputum, BAL, EDTA Plasma 1 ml.	2-8 °C	2,500	Out Lab	
EBV PCR (Qualitative) [BML]	M240	3 days	Real-time PCR		EDTA plasma or serum 1 mL / EDTA Blood 3-5 ml/ CSF ≥ 0.5 mL / Aqueous humor 1 mL / Urine 10 mL / Fresh Tissue 1 cm. / Sputum 1 ml (Update : 18/10/2019) หากต้องการตรวจเพื่อดูในเม็ดเลือดขาว ให้ระบุด้วย เพราะไม่เช่นนั้น MT จะขึ้นและใช้ Plasma	2-8°C (Separate plasma within 6 hours of collection)	2,000	In Lab	
EBV Quantitative RT-PCR [Chula]	H096	7 days	Real time PCR	-	CSF , urine , saliva or any fluid , or EDTA whole blood 2 ml	2-8 °C	2,530	Out Lab	
EBV Viral load [Rama]	H095	4 days	Hydrolysis Probe		EDTA plasma 2 ml or CSF/Fluid 1 ml or urine 5 ml , perform immediately Brain abscess in sterile container	Plasma/ Fluid ; Freeze urine ; transport at 2-8 °C, do not freeze Abscess: 2-8 °C	2,200	Out Lab	
EBV(EA) IgG	P314	3 days	immunofluorescence		serum 1 ml	2-8 °C	1,500	Out Lab	
Echinococcus Antibody(Tropmed)	P100	16 days	immunoblot		serum 1 ml	2-8 °C	460	Out Lab	
Echovirus Isolation (NIH)	H037	30 Days	cell culture		Nasopharyngeal wash in VTM or CSF in sterile container	2-8 °C	1,150	Out Lab	
Ecstasy (MDMA) (Urine Rapid Test)	V435	1 day	strip (Immunochromatography)		Random Urine 5 ml	2-8 °C	200	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Efavirenz level (EFV)(RAMA)	V693	11 days	HPLC	N/A	EDTA whole blood 6 mL or EDTA plasma 2 mL [Centifuge 1500 rpm 15 minute(Should be sent to subcontract within 6 hrs after blood collecting)	EDTA Whole blood 2-8 °C 6 Hr, Plasma -20 °C 48 Hr.	1,330	Out Lab	
EGFR exon 20 (including T790M) mutation (BML)	M502	10 days	PCR and bi-directional direct DNA sequencing		Formalin-Fixed,Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	4,600	In Lab	
EGFR mutation in FFPE (COBAS) [BML]	M501	10 days	Multiplex Real-time PCR amplify and detect 7 groups of EGFR mutations; 1. Exon 18 G719X 2. Exon 21 L858R 3. Exon 21 L861Q 4. Exon 19 deletion 5. Exon 20 insertion 6. Exon 20 S768I and 7. Exon 20 T790M		Formalin-Fixed,Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	12,000	In Lab	/
EGFR mutation in PLASMA (COBAS) [BML]	M503	8 days	Multiplex Real-time PCR amplify and detect 7 groups of EGFR mutations; 1. Exon 18 G719X 2. Exon 21 L858R 3. Exon 21 L861Q 4. Exon 19 deletion 5. Exon 20 insertion 6. Exon 20 S768I and 7. Exon 20 T790M Semi-Quantitative value was calculated from exon 28		Submit only 1 of the following specimens 1) EDTA plasma 5 mL .Plasma must be separated within 4 hours (1,600 x g for 20 minutes) If any of the tubes demonstrates hemolysis(red plasma), the tube should be discarded. EDTA plasma should be transported frozen. 2) Blood collected in cfDNA blood collection tube (Streck tube® or PAXgene tube®) . Customer can buy PAXgene tube® for blood collection, if need. (M097)	<ul style="list-style-type: none"> For EDTA plasma , keep at 2-8 °C up to 3 days , keep at -20 °C up to 7 days , keep at -70 °C up to 12 months. • If blood was collected in collection tube (Streck tube® or PAXgene tube®) it can be kept at room temperature (15-25°C) for up to 7 days or at higher temperatures (up to 35°C) for up to 1 day. 	19,000	In Lab	
EGFR Mutations Cobas®(CE-IVD)(Chula GenePro)	M902	18 days	PCR		Tissue in paraffin block + H&E slide + Pathology report	room temp	12,550	Out Lab	
Electrolytes	C004	1 day	Na,K,Cl - Indirect ion-selective electrode (ISE) CO2 - Enzymatic colorimetric	Na : 136 – 148 mmol/L ; เด็ก 132 – 145 mmol/L K : 3.5 – 5.5 mmol/L ; เด็ก 3.5 – 5.5 mmol/L Cl : 99 - 111 mmol/L ; เด็ก 99 - 111 mmol/L CO2: 22 – 29 mmol/L ; เด็ก 22 – 29 mmol/L	serum 1 ml (no hemolysis)		200	In Lab	/
Electron Microscopy Examination (Chula)	D450	30 Days	Electron microscope		any Tissue or cell (in 1 ml of 3% glutaraldehyde)	2-8 °C	9,200	Out Lab	
ENA Profile [Pro Lab]	T112	7 days	Immunoblot		serum 1 ml	2-8 °C	2,500	Out Lab	
Endomysial (IgA)Titer (Mayo)	N784	21 Days	Staining of Rhesus Monkey Esophagus Substrate by Indirect Immunofluorescence Assay (IFA) for IgA Endomysial Antibodies (EMA)	Negative in normal individuals; also negative in dermatitis herpetiformis or celiac disease patients adhering to gluten-free diet.	Serum 3 mL (Endomysial Antibodies (IgA), 2mL Endomysial (IgA), Titer 1 mL)	Frozen (Stability30 days)	19,140	Out Lab	
Endotoxin Assay (Thai Can Biotech)	E112	11 Days	Limulus Amoebocyte Lysate Test	-	Water RO 10 ml in sterile container (Pyrogen free)	2-8 °C 7 Days	2,300	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Endotoxin Assay and total bacteria count (Thai Can Biotech)	E113	9 Days	Limulus Amoebocyte Lysate Test	-	Water RO 10 ml in sterile container (Pyrogen free)	2-8 °C	2,500	Out Lab	
Entamoeba histolytica Ab (Siriraj)	P356	11 days	ELISA		Serum (Only) 2 ml	2-8 °C	1,250	Out Lab	
Enterovirus 71 IgM screening	P874	1 day	Immunochromatography	Negative	serum 1 ml	Room temperature	390	In Lab	
Enterovirus 71 PCR (BML)	M326	3 days	Real-time PCR (Taqman probe) for Enterovirus 5'UTR and Enterovirus 71 VP1		EDTA Plasma or Serum 1 mL / CSF 0.5 mL / Respiratory specimen 1 mL !!! STOOL OR RECTAL SWAB IS NOT ACCEPTABLE !!!	2-8°C (Separate plasma within 6 hours of collection)	2,300	In Lab	
Enterovirus 71 PCR (Rama)	H204	3 days	Real-Time PCR		Nasopharyngeal Aspirate 3 ml, Throat swab in VTM , Rectal swab in VTM , Body fluid 3 ml , EDTA Blood 3 ml Stool in VTM	2-8 °C	2,300	Out Lab	
Enterovirus Isolation	P790	30 Days	cell culture & micro NT		stool 8 gm in sterile container (rectal swab is unacceptable),CSF 2 ml(minimum 1.5 ml),throat swab in VTM(entero)	2-8 °C	1,040	Out Lab	
Enterovirus PCR (Pan-enterovirus)	M220	3 days	Real-time PCR (Taqman probe) for 5'UTR region of pan-enterovirus		EDTA Plasma or Serum 1 mL / CSF 0.5 mL / Respiratory specimen 1 mL !!! STOOL OR RECTAL SWAB IS NOT ACCEPTABLE !!!	2-8°C (Separate plasma within 6 hours of collection)	2,200	In Lab	
Enterovirus PCR [Chula]	H187	5 days	PCR		Nasopharyngeal Aspirate in sterile container or VTM or sterilized NSS, Throat swab in sterile container or VTM or sterilized NSS, Stool in sterile container or VTM Rectal swab CSF in sterile container or VTM or sterilized NSS, Clotted Blood in severe case	2-8 °C	2,500	Out Lab	
Enterovirus PCR and identification [BML]	M325	7 Days	RT-Nested PCR and direct sequencing of VP1 gene according to WHO criteria for enterovirus surveillance		EDTA Blood 3-5 ml; EDTA Plasma 1 ml Clotted Blood 3-5 ml; Serum 1 ml CSF At lease 0.5 ml Nasopharyngeal Aspirate 2-3 ml Throat swab / Lesion swab in sterile container Throat swab / Lesion swab in VTM !!! STOOL OR RECTAL SWAB IS NOT ACCEPTABLE !!!	2-8oC (3 Days) -20oC (1 month) -70oC (6 months)	5,000	In Lab	
Enterovirus screening	P305	1 day	Immunochromatographic assay .		Stool 2 gram or ml	2-8 °C	420	In Lab	
Enterovirus subtyping PCR (Pan-EV, EV71, CoxA6, CoxA16)	M327	3 days	Real-time PCR (Taqman probe) for Enterovirus 5'UTR and Enterovirus 71/CoxA6/CoxA16 VP1		EDTA Plasma or Serum 1 mL / CSF 0.5 mL / Respiratory specimen 1 mL !!! STOOL OR RECTAL SWAB IS NOT ACCEPTABLE !!!	2-8°C (Separate plasma within 6 hours of collection)	2,500	In Lab	
Enterovirus71 (RNA detection)	H085	5 days	Realtime PCR		Nasopharyngeal Aspirate in VTM or Stool in sterile container or CSF or EDTA plasma 1 ml	Nasopharyngeal Aspirate in VTM : 2-8 °C Stool : Freeze CSF : 2-8 °C EDTA plasma : Freeze	2,120	Out Lab	
Enterovirus71 and Coxsackie A16 PCR [NIH]	H087	9 days	Reverse transcription-polymerase chain reaction (RT-PCR)		1) Throat swab/Nasopharyngeal swab in VTM for enterovirus ภายใน ช่วงสี่ดาวแรกหลังวันเริ่มมีไข้ 2) stool 4-8 gram in sterile container ภายใน 2 สัปดาห์แรกหลังวันเริ่มมีไข้ 3) Nasopharyngeal wash in sterile container	Freeze (stability is 3-5 days)	2,530	Out Lab	
Enterovirus71 Antibody (DMSC)	P721	16 days	micro neutralization	If 4-fold rising titer revealed it could be considered positive	paired serum 1 ml (single serum is allowed in case of dead)	2-8 °C	640	Out Lab	
Epigenetic info (Rapport/Genosense)	B619	35 days	SNPs		Buccal swap in special kit	Room Temperature	11,550	Out Lab	
Epstein-Barr VCA IgA	P739	5 days	immunofluorescence		serum 1 ml	2-8 °C	1,000	Out Lab	
Epstein-Barr VCA IgG	P740	4 days	EIA		serum 1 ml	2-8oC	350	In Lab	/
Epstein-Barr VCA IgG, IFA titer (BPL)	P907	3 days	IFA	Less than 1:10	serum 1-2 ml	2-8 °C	1,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Epstein-Barr VCA IgM	P741	4 days	ELISA		serum 1 ml	2-8 °C	400	In Lab	/
Epstein-Barr VCA IgM, IFA titer (BPL)	P783	3 days	IFA	Negative < 1:10	serum 1-2 ml	2-8 °C	1,000	Out Lab	
Epstein-Barr Virus (PCR) [Rama]	P742	5 days	Real time PCR		(frozen EDTA plasma 2 ml)or (frozen CSF or Fluid 1 ml)or (urine 5 ml , perform immediately , transport at refrigerated temp, do not freeze)	depend on sample type	2,000	Out Lab	
Erythropoietin	N780	2 days	chemiluminescence	3.7-29.5 mIU/mL	serum 1 ml	2-8 °C	1,630	In Lab	
Erythropoietin Antibody (Chula)	N781	16 days	RIP (Radio immunoprecipitation)		serum 5 ml and EDTA whole blood 3 ml	2-8 °C	4,600	Out Lab	
Escherichia coli O157 Antigen	P130	9 days	culture , biochem test , agglutination		E.coli 5 colonies on Nutient agar or Muller Hinton agar	room temp	520	Out Lab	
ESR	A080	1 day	Optoelectronic sensors		EDTA blood 2 ml	2-8 °C stability 2 hrs	60	In Lab	/
Essential Estrogens (Thai cell Fix)	C187	35 Days			120 ml Aliquot of urine (24-hour urine collection) with Aldosterone OR 120 ml Aliquot of urine (first morning void)	x	28,000	Out Lab	
Essential Fatty acids (Biostem)	C673	23 days	N/A		EDTA whole blood 6 mL	2-8 °C	6,500	Out Lab	
Estradiol (E2) BGH	N240	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	300	In Lab	/
Estriol (E3)(BRIA)	N275	5 days	TRACE	nmol/L	serum 1 ml	2-8 °C	1,250	Out Lab	
Estrogen Metabolism Assessment, Urine (Thai cell Fix)	C812	35 Days			10ml of first morning urine (frozen)	frozen	17,860	Out Lab	
EstroGenomic™ Profile (Buccal swab)(Thai cell Fix)	B401	23 Days			Buccal swab in special kits	Room temp	39,900	Out Lab	
Estronex Profile, Urine (Thai cell Fix)	C423	21 days			13 ml of first morning urine (frozen)	Freeze the yellow-cap plastic vial and ice pack.	13,600	Out Lab	
Ethyl acetate(Rama)	V132	21 days	SPME-GC/MS Quantitative Analysis	No reference range	Na Fluoride blood 5 ml	2-8 °C	700	Out Lab	
Ethyl benzene (Mandelic acid)(BOMC)	V106	16 days	HPLC	Non-exposed person < 5 mg/g creatinine, Exposed person < 1500 mg/g creatinine	Urine 10 ml.	2-8 °C	570	Out Lab	
Ethylbenzene (Sum of mandelic acid and phenylglyoxylic acid)(HPLC)	S106	within 7 days(except checkup group)	HPLC	0.00 - 150.00 mg/g creatinine (ACGIH2020)	Random urine 10-20 mL (end of shift)	Store at 2-8 °C	600	In Lab	/
Ethylbenzene in Blood (HS-GC-MS)	S090	within 5 days(except checkup group)	GC-MS	< 1.50 mg/L	NaF or EDTA whole Blood 2 mL	Store at 2-8 °C Parafilm seal	550	In Lab	/
Euglobulin Lysis Time	K230	5 days	modified sherry	Normal : no lysis within 2 hours Abnormal : complete lysis before 2 hours	Na Citrate plasma 2 ml	Freeze	520	Out Lab	
Everolimus (Cirtican)	V835	3 days	FPIA	ug/L(3.00-8.00)	EDTA whole blood 3 ml	2-8 °C : stability of drug is 7 Days 18-25 °C : stability of drug is 5 Days	1,780	Out Lab	
Exfoliative Cytology (Lipid&Iron Laden Macrophage) (Chula)	A015	9 days	staining		Bronchial washing or any fluid 3 mL	2-8 °C	640	Out Lab	
Exome for undiagnosed disease (Proband only)(LMGG)	M913	3 months	PCR sequencing		EDTA blood 6 ml (3 ml for children < 8 years)	2-8 °C	70,000	Out Lab	
Exome for undiagnosed disease (Trio)(LMGG)	M912	4 months	PCR sequencing		Blood in EDTA (lavender top tube) Two parents and proband (พ่อ แม่ ลูก) • 3-5 ml for children < 12 years • 8-10 ml for adults	2-8 °C	170,000	Out Lab	
Expanded carrier screening 130 disease (LMGG)	MM637	45 days	1. Next Generation Sequencing (NGS) 2. Real-Time quantitative PCR, or qPCR 3. FMS-PCR		EDTA whole blood 9 ml (3ml x 3 tubes)	2-8 °C within 48 Hr	44,800	Out Lab	
Expanded carrier screening 630 disease (LMGG)	MM638	45 days	1. Next Generation Sequencing (NGS) 2. Real-Time quantitative PCR, or qPCR 3. FMS-PCR		EDTA whole blood 9 ml (3ml x 3 tubes)	2-8 °C within 48 Hr	57,400	Out Lab	
Expanded Newborn Screening (Siriraj)	C803	9 days	GC/MS		Blood in filter paper (6 drops)	room temp	3,435	Out Lab	
Expanded Newborn screening +Congenital Hypothyroidism (CH)(ATGenes)	C826	18 Days	Tandem Mass Spectrometry (MS/MS) and Immunoassay		Dried blood spot on filter paper	Room temp.	5,000	Out Lab	
Expanded Newborn screening +Congenital Hypothyroidism (CH)(Siriraj)	C804	9 days	GC/MS		Blood in filter paper (6 drops)	room temp	0	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Expanded Newborn screening +Congenital Hypothyroidism (CH)+Thalassemia (ATGenes)	C827	18 Days	Tandem Mass Spectrometry (MS/MS) and Immunoassay		Dried blood spot on filter paper	Room temp.	5,500	Out Lab	
F2-Isoprostanes (Mayo)	N336	18 Days	Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)	> or =18 years: < or =1.0 ng/mg creatinine <18 years: not established	Random urine 5 mL (No preservative.)	Frozen : stability 90 Days	15,000	Out Lab	
Fabry disease (GLA)(LMGG)	MM523	1 month	Next-Generation sequencing		EDTA blood 6 ml	2-8 °C	13,440	Out Lab	
Factor H (Questdiagnostics)	T450	11 days	Radial immunodiffusion	160-412 ug/ml	- EDTA plasma 2 ml (Frozen) - Centrifuge at room temperature within one half hour of collection; preferably immediately after venipuncture. Transfer the cell-free plasma to a clean tube and immediately freeze the cell-free plasma on dry ice or at -70°	Frozen	18,000	Out Lab	
Factor II Assay (Chula)	K100	9 days	clotting (CA500 , Sysmex)		Citrate plasma 2 ml	Freeze	1,330	Out Lab	
Factor II Assay (Siriraj)	K101	5 days	one – Stage method on PT base		Na citrate plasma 1 ml	Freeze	3,500	Out Lab	
Factor II gene mutation(Prothrombin 20210G>A Mutation)	M356	8 days	Real-time Allele Specific PCR	Negative for Prothrombin 20210G>A mutation	EDTA Whole blood 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	1,500	In Lab	/
Factor IX (9) Inhibitor [Chula]	K151	7 days	clotting (CA500 , Sysmex)	Reference range = no inhibitor	Na Citrate plasma 2 ml	Freeze	1,650	Out Lab	
Factor IX Assay	K150	5 days	clotting (CA500 , Sysmex)		Na Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor V Assay (Chula)	K110	10 days	clotting (CA500 , Sysmex)		Na Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor V Assay (Siriraj)	K111	5 days	one – Stage method on PT base		Na citrate plasma 1 ml	Freeze	3,500	Out Lab	
Factor V Leiden (FV1691G>A) PCR	M426	8 days	Real-time PCR (Taqman probe) for R506Q mutation of Factor V gene	Negative for factor V Leiden mutation	EDTA blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,300	In Lab	/
Factor VII (7) Inhibitor(Chula)	K134	9 days			Na Citrate plasma 2 ml	Freeze	1,330	Out Lab	
Factor VII Assay (Chula)	K120	9 days	clotting (CA500 , Sysmex)		Na Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor VIII Assay (Chula)	K130	7 days	clotting (CA500 , Sysmex)		Na Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor VIII Assay (Siriraj)	K131	5 days	One stage of Factor VIII		Na Citrate plasma 2 ml	Freeze	3,500	Out Lab	
Factor VIII Inhibitor (Chula)	K145	9 days	clotting (CA500 , Sysmex)	no inhibitor	Na Citrate plasma 2 ml	Freeze	1,650	Out Lab	
Factor VIII Inhibitor (Siriraj)	K146	5 days		Negative	Na citrate plasma 2 ml	Freeze	4,200	Out Lab	
Factor X Assay (Chula)	K160	9 days	clotting (CA500 , Sysmex)		Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor X Assay (Siriraj)	K161	5 days	one – Stage method on PT base		Na citrate plasma 1 ml	Freeze	3,500	Out Lab	
Factor XI Assay (Chula)	K170	9 days	clotting (CA500 , Sysmex)		Na Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor XI Assay (Siriraj)	K171	9 days	one – Stage method on PT base		Na citrate plasma 1 ml	Freeze	3,300	Out Lab	
Factor XIII Assay (Chula)	K180	9 days	clotting (CA500 , Sysmex)		Na Citrate plasma 2 ml	Freeze	1,500	Out Lab	
Factor XIII Screening (Siriraj Hospital)	C469	11 days	urea solubility test		Na Citrate plasma 2 ml	Freeze	340	Out Lab	
Factor XIII V34L Polymorphism [BML]	M398	10 days	PCR and direct sequencing for Factor XIII V34L polymorphism		EDTA Blood 3-5 ml	Room temperature 1 day 2-8oC 1 month DO NOT FREEZE!!!	3,620	In Lab	
Faecal Occult Blood & Transferrin (Rapid test)	D384	1 day	Immunochemical assay	Negative	Stool 2 gram or 2 ml	2-8 °C	230	In Lab	
Familial Adenomatous Polyposis (sequence analysis of APC gene)(CGC genetics)	M659	52 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	48,000	Out Lab	
Familial Atypical Mycobacteriosis (sequence analysis of IL12B gene)(CGC genetics)	MM985	3 Month			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 oc)	27,500	Out Lab	
Familial Hemophagocytic Lymphohistiocytosis 3 (sequence analysis of UNC13D gene)(CGC genetics)	M642	67 days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	96,000	Out Lab	
Familial Hemophagocytic Lymphohistiocytosis 5 (sequence analysis of STXB2 gene)(CGC genetics)	M643	67 days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	51,000	Out Lab	
Familial hypercholesterolemia (APOB,LDLR, PCSK9)(LMGG)	MM071	3 months			EDTA whole blood 6 ml	2-8 °C	71,400	Out Lab	
Familial hypertrophic cardiomyopathy type 1 (CMH1, sequence analysis of MYH7 gene)(CGC genetics)	M717	67 days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25°C)	98,500	Out Lab	
Familial Breast /Ovarian Cancer (Sequence analysis of TP53 gene)(CGC genetics)	M604	67 Days	PCR Sequencing		EDTA whole blood 3 ml	room temp (20-25 °C)	26,500	Out Lab	
FAP (APC) Mutation [Rama]	B068	6 month	PCR		EDTA Whole Blood 3 - 5 ml.	2-8 °C	17,250	Out Lab	
FAP (APC) Mutation [Siriraj]	B067	6 month	polymerase chain reaction (PCR), screening mutation by denaturing high-performance liquid chromatography (DHPLC) and direct DNA sequencing		EDTA Whole Blood 3 - 5 ml.	2-8 °C	18,750	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Fasciola Antibody (Tropmed)	P835	16 days	Immunoblot		serum 2 ml (minimum 1 ml)	2-8 °C , Stability 7 Days	460	Out Lab	
Fat in stool (Oil Red O)(Trop Med)	D455	5 days	Oil Red O		Stool/ Sputum / Urine 10 mL	2-8 °C stability 7 days	410	Out Lab	
Fat in stool (Sudan black III) [Siriraj]	D554	5 days	Sudan black		Stool	2-8 °C	300	Out Lab	
Fatty Acid Profile Essential (Mayo)	C085	30 days	Stable Isotope Dilution Gas chromatography/Mass Sp		Fasting serum 2 mL (Minimum Vol 0.2 mL) 1. Patient should fast overnight (12-14 hours). 2. Patient must not consume any alcohol for 24 hours before the specimen is drawn.	Frozen (Frozen: 92 days, Room temp: UNACCEPTABLE, Refrigerated: UNACCEPTABLE)	17,120	Out Lab	
Fatty Acid Profile, Peroxisomal (C22-C26)(Mayo)	C086	18 Days	Gas Chromatography-Mass Spectrometry (GC-MS) Stable Isotope Dilution Analysis	C22:0 < or =96.3 nmol/mL C24:0 < or =91.4 nmol/mL C26:0 < or =1.30 nmol/mL C24:0/C22:0 RATIO < or =1.39 C26:0/C22:0 RATIO < or =0.023	Preferred: Plasma Sodium heparin 2 mL Acceptable: Plasma EDTA 2 mL or lithium heparin 2 mL	Frozen (Stability 92 days)	15,400	Out Lab	
FDP D-Dimer(ELFA)	K245	1 day	enzyme-linked immunofluorescence assay (ELFA) combine a two-step enzyme immunoassay sandwich method with a final fluorescent detection (เครื่อง VIDAS)		Na Citrate plasma 2 ml	Freeze	700	In Lab	/
Female Comprehensive Package (urine)(Biostem)	C850	23 days	N/A		random urine or 24 hour-urine (24 hour-urine is preferred)	2-8 °C	22,400	Out Lab	
Female Hormone Profile(Saliva) [ADL]	N792	23 days			saliva 5 ml in collecting kit (1 tube)	2-8 °C, do not freeze	8,400	Out Lab	
Ferritin	N110	1 day	Chemiluminescent microparticle immunoassay (CMIA)	FB-99905-1500µg/mL MB-99905-2000µg/mL	serum 1 ml	2-8 °C-1week	300	In Lab	/
Fetal Fibronectin	N471	1 day	Immunochromatography method.	Negative	Cervicovaginal secretion in collection kit .	Sample can be stored for 8 hours at room temp , 3 days at 2-8 C	1,650	In Lab	
Fetal Hemoglobin stain	A570	2 days	Acid elution		EDTA blood 2 ml (Maternal blood)	2-8 °C	150	In Lab	
FGFRF1 (8p11.2) Rearrangement, FISH (Mayo)	B597	16 Days	Fluorescence In Situ Hybridization (FISH)		1. Sodium heparined whole blood 10 mL or 2. Sodium heparined bone marrow 2 mL.	Storage 2 – 8°C or Ambient stability 5-7 days	45,500	Out Lab	
Fibrinogen Level	K090	1 day	Automated Blood Coagulation Analyzer		Na Citrate plasma 1 ml	Freeze	350	In Lab	/
Fibroblast Growth Factor receptor 2 gene (FGFR2)(Siriraj)	B045	30 Days	polymerase chain reaction (PCR) ตรวจด้วย direct DNA sequencing		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	3,450	Out Lab	
Fibroblast Growth Factor receptor 3 gene(FGFR3)	B033	2 months	polymerase chain reaction (PCR) และ direct DNA sequencing		EDTA whole blood 10 ml or Amniotic fluid in sterile container	2-8 °C	3,450	Out Lab	
Filaria Antibody(Trop med)	P830	18 days	immunoblot		serum 1 ml	2-8 °C	460	Out Lab	
Filaria Antigen (Chula)	P831	11 days	ELISA (Specific only Wuchereria bancrofti)		serum 1 ml	2-8 °C	3,200	Out Lab	
Filaria IgG4 Ab(Siriraj)	P896	11 days	ELISA		Serum 2 ml.	2-8 °C	900	Out Lab	
Filaria staining (Tropmed)	A685	11 days	Giemsa stain + concentration technique	-	blood 1 ml (in 9 ml of 2%formalin) + 2 thick film : sample should be collected at 10PM - 12PM	2-8 °C	410	Out Lab	
FIP1L1-CHIC2-PDGFR(4q12) Del ,Break	B410	16 days	FISH	N/A	Heparinized bone marrow 3 ml or Heparinized whole blood 6 ml.	2-8 °C (Send to subcontractor with in 24 hr after collection)	4,030	Out Lab	
FIP1L1-PDGFR Fusion gene (Siriraj)	B411	30 days	nested-Reverse transcription Polymerase chain reaction (Qualitative)		EDTA whole blood 6 ml or EDTA bone marrow 2 ml	2-8 °C (Send to subcontractor with in 24 hr after collection)	3,360	Out Lab	
First Trimester Screening [NHS]	T521	6 days	Time Resolved Fluorescence (TRF)	Screening negative	serum 2 ml	2-8oC (1 week) -20 oC (1 month)	1,600	In Lab	/
First trimester screening for pre-eclampsia	T536	9 days	Time Resolved Fluorescence (TRF)	Low Risk	serum 2 ml	2-8oC 48 hrs -20oC long time	1,500	In Lab	
First Trimester Screening(BRIA)	T534	16 days	EIA		serum 2 ml	2-8 °C	3,000	Out Lab	
First Trimester Screening(Rama)	T535	12 days	EIA		Serum 2 ml	2-8 °C	1,630	Out Lab	
FISH for Alagille syndrome(Chromosome Center)	B393	16 days	FISH	N/A	Heparinized whole blood 5 ml	2-8 °C	4,030	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
FISH for CBF/ MYH11, t(16,16),inv(16)(Chromosome center)	B131	12 days	FISH	N/A	Heparin blood 5 ml or bone marrow 5 ml	2-8 °C	5,000	Out Lab	
FISH for CCND1/IGH, t(11;14)(Chromosome center)	B133	12 days	FISH	N/A	Heparin blood 5 ml or bone marrow 5 ml	2-8 °C	5,000	Out Lab	
FISH for chromosome 5q deletion (5q-syndrome)(5q31/5q33)(Chula)	B572	16 days	FISH		1. Sodium Heparinized whole blood 3 ml or 2. Sodium Heparinized bone marrow 3 ml	2-8 °C	5,000	Out Lab	
FISH for CLL (Chromosome Center)	B439	12 days	FISH	N/A	Heparinized bone marrow or blood 3 ml	2-8 °C	13,800	Out Lab	
FISH for DiGeorge/VCFs TUPLE1 syndrome(22q11)(Chromosome)	B135	16 days	FISH	N/A	1. Heparinized whole Blood 5 ml or 2. Amniotic fluid 20 mL	2-8 °C	4,030	Out Lab	
FISH for lymphoma t(11;14)(Chromosome center)	B599	12 days	FISH	N/A	Heparin blood 5 ml or bone marrow 5 ml	2 - 8 °C	5,000	Out Lab	
FISH for MM probe panel (Chromosome center)	B132	12 days	FISH	N/A	Heparin blood 5 ml or bone marrow 5 ml	2-8 °C	15,000	Out Lab	
FISH for Multiple myeloma (Chulabhorn Research Institute)	B389	16 days	FISH	N/A	Heparinized whole blood or Heparinized bone marrow 3 ml	2-8 °C	16,000	Out Lab	
FISH for ROS1 (6q22) Rearrangement (MAYO)	MM761	16 days	Fluorescence In Situ Hybridization (FISH)		1. Tissue block: Submit a formalin-fixed, paraffin-embedded (FFPE) tumor tissue block. Blocks prepared with alternative fixation methods may be acceptable; provide fixation method used.+ Pathology report Or 2. Slides : Four consecutive, unstained, 5 micron-thick sections placed on positively charged slides, and 1 hematoxylin and eosin-stained slide.+ Pathology report	Room temperature	53,300	Out Lab	
FISH for Rubinstein-Taybi syndrome (Chromosome Center)	B388	12 days	FISH	N/A	Heparinized whole blood 5 ml	2-8 °C	4,375	Out Lab	
FISH for t(11;14)(CCND1/IGH) สถาบันวิจัยจุฬาภรณ์	B048	16 days	FISH	N/A	Heparinized bone marrow 5 ml	2-8 °C	4,375	Out Lab	
FISH for t(16;16)(CBFB break),inv(16)(Chulabhorn Research Institute)	B245	16 days	FISH	N/A	Heparinized bone marrow 5 ml	2-8°C	4,030	Out Lab	
FISH for t(8;21)(AML/ETO) (Chulabhorn Research Institute)	B246	16 days	FISH	N/A	Heparinized bone marrow 5 ml	2-8 °C	4,030	Out Lab	
FISH for William syndrome [Rama]	B391	11 days	FISH	-	Heparinized whole blood 5 ml. (Minimum Vol 3 ml.)	2-8 °C	3,960	Out Lab	
FISH for William syndrome(Chromosome Center)	B392	16 days	FISH	N/A	Heparinized whole blood 5 ml. (Minimum Vol 3 ml.)	2-8 °C	4,030	Out Lab	
Flow cytometry for CD19(B-Cell)(BML)	M480	3 days	Flow cytometry		EDTA Whole Blood 3-5 mL ; Required CBC result with the same specimen.	20-25°C (Send to lab within 30 hours of collection)	1,800	In Lab	/
Flow cytometry for Double-Negative T-cells panel(RAMA)	A831	9 days	Flow cytometry		1. EDTA peripheral blood 5 ml or 2. EDTA bone marrow 5 ml or 3. Heparinized peripheral blood 5 mL or 4. Heparinized bone marrow 5 ml	room temp	4,375	Out Lab	
Flow cytometry for Zap70 and CD38 for CLL panel(RAMA)	A832	9 days	Flow cytometry		1. EDTA peripheral blood 5 ml or 2. EDTA bone marrow 5 ml or 3. Heparinized peripheral blood 5 mL or 4. Heparinized bone marrow 5 ml	room temp	3,750	Out Lab	
Flow cytometry for Lymphocyte Subset Enumeration (T cell/B cell/NK cell) [BML]	M068	2 days	Flow cytometry		EDTA Whole Blood 3-5 mL ; Required CBC result with the same specimen.	20-25°C (Send to lab within 30 hours of collection)	4,400	In Lab	
Flow cytometry for NK Cell (CD16/CD56) (BML)	M481	3 days	Flow cytometry		EDTA Whole Blood 3-5 mL ; Required CBC result with the same specimen.	20-25°C (Send to lab within 30 hours of collection)	1,600	In Lab	
FLT3 gene (detection of ITD and TKD mutations)(CGC genetics)	M611	28 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	16,700	Out Lab	
FLT3 gene (RAMA)	M983	16 Days	PCR and PCR-RFLP		EDTA Blood 5-10 ml or EDTA Bone marrow 3 mL (sent to subcontract with in 24 h.)	Room temp.	4,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
FLT3 mutations (ITD and D835) [BML]	M361	10 days	PCR and direct sequencing		EDTA whole blood 3-5 ml (With leukemic cells) EDTA bone marrow 3-5 ml (With leukemic cells)	2-8°C 7 days Room temperature 3 days	5,400	In Lab	
Fluoride (RAMA)	V480	7 days	Ion Selective Electrode ; ISE	Prior to shift 2 mg/L , End of shift 3 mg/L	Random Urine 50 ml	2-8 °C	380	Out Lab	
Folate (Red Cell)	N130	9 days	chemiluminescence		fasting EDTA whole blood 3 ml (protected from light)	Refrigerate 5 days , Room temperature 3 days	640	Out Lab	
Folate (Serum)	N127	1 day	Chemiluminescent microparticle immunoassay (CMIA)	F/M0-999B.1-20.5ng/mL	serum 1 ml (Samples for folate determinations should be collected from fasting persons.)	2-8 °C protected from light	500	In Lab	/
Folic Acid	N125	1 day	Chemiluminescent microparticle immunoassay (CMIA)	F/M0-999B.120.5ng/mL	serum 1 ml (Samples for folic acid determinations should be collected from fasting persons.)	2-8 °C protected from light	500	In Lab	
Folicle Stimulating Hormone (FSH) (BGH)	N243	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	400	In Lab	/
Food + Inhalation China Profile specific IgE (Immunoblot)	J386	2 days	immunoblot	Class 0 , <0.35 kU/l	serum 1 ml	2-8 °C	1,700	In Lab	
Food + Inhalation specific IgE (Immunoblot)	J236	2 days	immunoblot	Class 0 , <0.35 kU/l	Serum 2 ml (minimum 1200 ul)	2-8 °C	2,700	In Lab	
Food + Inhalation Thailand Profile specific IgE (Immunoblot)	J149	2 days	immunoblot	Class 0 , <0.35 kU/l	Serum / 1 ml (minimum 700 ul)	2-8 °C	2,280	In Lab	
Food Allergy IgE-General, Western 19 Tests(BioStem)	J369	47 days	N/A		SST Tube 2 tubes (Special kit)	2-8 °C	16,500	Out Lab	
Food Allergy IgG ,96 tests Asian [ADL]	J246	47 days			SST Tube 1 tube (Special kit)	2-8 °C	16,500	Out Lab	
Food Allergy IgG ,96 tests Western (BioStem)	J249	47 days	N/A		SST tube 1 tube (Special kit)	2-8 °C	16,500	Out Lab	
Food Allergy IgG-Vegatarian 95 Tests(BioStem)	J372	47 days	N/A		SST Tube 2 tubes (Special kit)	2-8 °C	15,000	Out Lab	
Food intolerance test	J121	5 days	microarray	Normal (<= 23 U/ml) Borderline (24 -29 U/ml) Elevated (>= 30 U/ml)	EDTA blood or Clotted blood 2 ml(minimum EDTA plasma or Serum 200 ul)	2-8 °C	12,500	In Lab	
Forensic toxicology (blood) [Siriraj]	V695	17 days	Immuni assay [FPIA (Axsym)] + Confirm [GCMS]		Blood	2-8 °C	3,055	Out Lab	
Forensic toxicology (tissue biopsy)(Siriraj)	V840	30 Days	N/A		Tissue biopsy in dry container	2-8 °C	2,400	Out Lab	
Formaldehyde (Chula)	V525	9 days	GC		NaF whole blood 3 -5 ml. only	2-8 °C	460	Out Lab	
Formaldehyde (Formic acid) [Reference toxico]	V126	21 days	GC-Headspace	-	urine 20 ml	2-8 °C	600	Out Lab	
Formic acid [Rama]	V125	6 days	GC-Headspace		random urine 50 ml	2-8 °C	625	Out Lab	
FoundationOne CDX (FOUNDATION MEDICINE, INC.)	MM700	23 days	Next Generation Sequencing (NGS)		1. FFPE block or 12 unstained slides (positive charged and unbaked at 4-5 micron thick) containing >30% tumor content 2. H&E Slide 3. Pathology Report 4. ใบ Request Foundation One (ต้องมีลายเซ็นแพทย์) + ใบ inform consent (ต้องมีลายเซ็นคนไข้+แพทย์) 1. ไขชดตรวจของ FoundationOne เท่านั้น 2. ให้แพทย์+คนไขเขียนใบ Request ให้เรียบร้อย (หากไม่มีชดตรวจ สามารถเขียนใบ request ล่วงหน้าได้ โดย Load จาก Salesforce) 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM / Outlab โดยตรง	Room Temp using FoundationOne Kit	213,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
FoundationOne CDX For Lung cancer (Foundation Medicine)	MM649	23 days	Next-generation Sequencing		1. FFPE block or 12 unstained slides (positive charged and unbaked at 4-5 micron thick) containing >30% tumor content 2. H&E Slide 3. Pathology Report 4.The requisition Foundation One have to sign by doctor and the consent form have to sign by doctor +patients 5.Use the Foundation One special kit only , and notify Lung Cancer case. 6.Have to send sample to BML only for recheck (Do not sent to out lab SPM)	Room temperature	118,700	Out Lab	
FoundationOne HEME For Sarcoma and Leukemia (FOUNDATION MEDICINE, INC.)	MM644	28 days	Uses hybrid-capture next-generation sequencing. • Identifies the four classes of genomic alterations (base substitutions, insertions and deletions, copy number alterations, and rearrangements). • Sequences DNA of the entire coding region of 406 genes and selected introns of 31 genes involved in rearrangements. • Sequences RNA of 265 genes commonly rearranged in cancer to better identify known and novel gene fusions. • Sequences to a median depth of ~500X unique coverage for DNA and RNA to an average of ~6.9 million unique pairs. • All specimen are reviewed by a hematopathologist or pathologist to ensure specimen viability and tumor content.		For Leukemia 1. Bone marrow Clot in FFPE Block 2.H & E Slide 3.Pathology report 4.Request Foundation One (ต้องมีลายเซ็นแพทย์) + ใบ inform consent (ต้องมีลายเซ็นคนไข้+แพทย์) For Sarcoma 1.FFPE Block 2.H & E Slide 3.Pathology report 4.Request Foundation One (ต้องมีลายเซ็นแพทย์) + ใบ inform consent (ต้องมีลายเซ็นคนไข้+แพทย์)	Room temperature	278,600	Out Lab	
FoundationOne Liquid (ACT) (FOUNDATION MEDICINE, INC.)	MM643	23 days	Analyzes blood samples from patients with solid tumors including lung, breast, colon, etc. • Uses a hybrid-capture, next-generation sequencing test method combined with proprietary computational algorithms that enable accurate variant calls by discriminating sequencing artifacts from bona fide mutations. • Identifies four classes of genomic alterations (base substitutions, insertions and deletions, copy number alterations, and rearrangements). • Sequences select clinically relevant genomic alterations in 62 commonly altered oncogenes. • Features an optimized laboratory process to achieve high sensitivity and specificity, with enhanced extraction methodology to generate high quantity and quality ctDNA. • Utilizes proprietary FragTag™ technology to accurately identify unique ctDNA fragments from plasma, further increasing sensitivity.		Whole blood in FoundationACT collection tubes (Streck BCT tube X 2) 1. ขอเบิกชุดตรวจ (ต้องเก็บโดยให้หลอดเลือด Streck tube ในชุดตรวจเท่านั้น) 2. แพทย์+คนไข้สามารถเซ็นใบ Request+Consent form ก่อนได้ระหว่างรอชุดตรวจ โดย Load จาก Salesforce 3. ส่งชุดตรวจให้ BML ตรวจสอบ ห้ามส่งให้ SPM/Outlab	Room temperature (Do not freeze) Send to Foundation Laboratory within 7 days (Streck BCT tube has stability 14 days)	226,100	Out Lab	
Fragile X syndrome [RAMA]	T113	2 months	Fluorescent based PCR technique using capillary electrophoresis และ methylation-sensitive polymerase chain reaction (MS-PCR)		EDTA whole blood 5 ml (minimum 2 ml)	2-8 °C	3,700	Out Lab	
Fragile X syndrome(Siriraj)	T840	2 months	methylation-sensitive polymerase chain reaction (MS-PCR) and PCR for CGG-repeat analysis		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	6,000	Out Lab	
Free androgen index and Testosterone(Chula)	P340	11 days	Electrochemiluminescence and Fluorescence immunoass		serum 2 ml	2-8 °C	690	Out Lab	
Free Beta HCG(Bria)	N445	5 days	EIA		serum 1 ml	2-8 °C	1,250	Out Lab	
Free Cortisol (Cortisol in urine 24 hrs)(BRIA)	N980	3 days	Chemiluminometric assay		24 Hr Urine (no Preservative) 30 ml	2-8 °C	690	Out Lab	
Free Light Chain	N500	4 days	Nephelometry	Free Kappa light chain 3.30-19.40 mg/L Free lambda light chain 5.71-26.30 mg/L Kappa/Lambda Ratio 0.26-1.65	serum 1 ml	Frozen	4,000	In Lab	
Free Light Chain (Kappa & Lambda) (Chula)	T102	8 days	Nephelometry	N/A	Serum 1 ml.	Frozen	3,000	Out Lab	
Free Light Chain (Rama)	N501	7 days	Nephelometry	Kappa 3.3-19.4 mg/L Lambda 5.71-26.3 mg/L Kappa/Lambda ratio 0.26-1.65	serum 1 ml or random urine , no preservative , volume of urine 10 ml	2-8 °C	2,200	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Free Radical Total - d-ROMS Test	C971	2 days	Kinetics	250 - 300 : Normal range 300 - 320 : Border condition 321 - 340 : Low level of oxidative stress 341 - 400 : Middle level of oxidative stress 401 - 500 : High level of oxidative stress >500 : Very high level of oxidative stress	serum 1 ml (It is necessary to quickly centrifugate the sample and separate the plasma.)	48 hours at 2-8 C , 36 hours at room temp, 2 months at -20 c (For serum or plasma)	950	In Lab	
Free Testosterone	N310	1 day	Colorimetric (Bromcresol Green)+Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	1,379	In Lab	
Friedreich ataxia, FXN gene (Siriraj)	MM988	2 month			EDTA blood 6-10 ml	2-8 °C	5,800	Out Lab	
Frontotemporal dementia (deletion/duplication analysis on MAPT and GRN genes)(CGC genetics)	M612	37 Days	MLPA		EDTA whole blood 3 ml	Room temp. (20-25 °C)	32,690	Out Lab	
Frontotemporal Dementia (GGGGCC expansion on C9ORF72 gene)(CGC genetics)	M661	37 Days			EDTA whole blood 3 ml ถ้าส่ง sample มารับพบ-เสาร์ ให้ส่งให้ BML สกัด DNA ก่อน เพราะเลือด เก็บได้แค่ 5 วัน	Room temp. (20-25 °C)	22,200	Out Lab	
Frontotemporal Dementia (sequence analysis of GRN gene)(CGC genetics)	M613	52 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	55,000	Out Lab	
Frontotemporal Dementia (sequence analysis of MAPT gene)(CGC genetics)	M614	52 days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	55,390	Out Lab	
Fructosamine	N800	1 day	NBT/Formazan Colorimetric	205 -285 umol/L	serum 1 ml	2-8oC 2 weeks	460	In Lab	/
Fructose intolerance (sequence analysis of ALDOB gene)(CGC genetics)	M615	67 Days	Sanger		EDTA whole blood 3 ml	Room temp. (20-25 °C)	30,500	Out Lab	
FTA-ABS IgG	P704	5 days	IFA		serum or CSF 1 ml	2-8oC	400	In Lab	
FTA-ABS IgM	P705	4 days	IFA		serum or CSF 1 ml	2-8oC	400	In Lab	
Fungus Culture	E085	30 Days	culture		-all types of sample in sterile container (Un acceptable tissue in formalin preserve) -sample in stuart transport media is acceptable - colony on sabouraud dextrose agar is acceptable (Please specify primary specimen)	2-8 °C	870	Out Lab	
Fungus Culture [Rama]	E902	45 Days	Culture		-all types of sample in sterile container -sample in stuart transport media is acceptable - colony on sabouraud dextrose agar is acceptable (Note primary specimen)	2-8 °C	870	Out Lab	
G6PD activity [Chula]	A303	11 days	enzyme kinetic assay		ACD whole blood 2 ml or EDTA whole blood 2 ml (minimal volume 1 ml)	2-8 C	1,100	Out Lab	
G6PD deficiency (Coding Sequence Analysis) [BML]	M006	10 Days	PCR and direct sequencing		EDTA Whole Blood 3-5 mL	2-8 °C	12,580	In Lab	
G6PD deficiency common Asian mutation (8 mutations)(LMGG)	MM776	9 days			EDTA whole blood 3-5 ml (2 tubes)	2-8 °C	4,000	Out Lab	
G6PD Quantitative (ACD blood)(Siriraj)	A301	11 days	MR test (Methemoglobin reduction test) Manual met		ACD whole blood 5 ml (ACD 600 ul + blood 5 ml --> mix) , stability 2 weeks	2-8 °C	650	Out Lab	
G6PD Quantitative (EDTA blood)(Siriraj)	A302	11 days	Enzyme kinetic assay	Normal range : (WHO) 7.9-16.3 IU/gHb, (G&Mc) 5.2-11.5 IU/gHb	EDTA whole blood 3 ml	2-8 °C	1,700	Out Lab	
G-6-PD Screening	A300	1 day	Fluorescent spot test		EDTA blood 2 ml	2-8oC	150	In Lab	
Galactomannan Antigen for Aspergillus(Chula)	N018	7 days	ELISA	N/A	Clotted blood(whole blood) 3 ml (Shipping on ice) or Serum 2 mL Frozen	2-8 °C	1,330	Out Lab	
Galactomannan Antigen for Aspergillus[Siriraj]	N016	7 Days	EIA	-	serum 1 ml or BAL 1 ml.	Frozen (on dry ice)	1,100	Out Lab	
Galactomannan Antigen of Aspergillus (Rama)	N377	7 days	EIA (manual)	body fluid don't have normal range	serum 1 ml or body fluid 1 ml	serum Freeze fluid 2-8 °C	900	Out Lab	
Galactosemia (deletion/duplication analysis of GALT gene)(CGC genetics)	M713	37 Days	MLPA (multiplex ligation-dependent probe amplification)		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	27,000	Out Lab	
Gamma Globulin (CSF)	C780	1 day	Nephelometry		CSF 1 ml	2-8oC	500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Gamma-Hydroxy Butyric acid level (GC/MS)(Rama)	V114	9 days	Gamma-Hydroxybutyric acid	Therapeutic: Not applicable; Endogenous GHB level 0-10 mg/L Toxic: Not applicable; Reporting limit > 10 mg/L Lethal: Not applicable	Serum 2 ml (DO NOT USE GEL TUBES) or urine 30 ml	2-8 °C	940	Out Lab	
Ganglioside Antibody IgG	N081	7 day	Immunoblot	Negative	Serum 1 ml	2-8 °C	1,850	In Lab	
Ganglioside Antibody IgG(Chula)	N031	11 days	Immunoblot		Serum 3 ml	2-8 °C	1,900	Out Lab	
Ganglioside Antibody IgM	N082	7 day	Immunoblot	Negative	Serum 1 ml	2-8 °C	1,850	In Lab	
Ganglioside Antibody IgM(Chula)	N032	11 days	Immunoblot		Serum 3 ml	2-8 °C	1,900	Out Lab	
Ganglioside Antibody(Prasat Neurological Institute)	N259	11 days	Immuno blot (EUROIMMUNE)	N/A	serum 2-4 ml	2-8 °C	1,900	Out Lab	
Gastrin hormone	N870	35 days	RIA	ค่าปกติ 44.5-104.0 ng/L	12 hours-Fasting serum 2 ml	Freeze	4,380	Out Lab	
Gastrointestinal Pathogen Panel (GI22) (STAT) [BML]	M258	Report within 4 hours after receive specimen	Nested PCR and melting curve analysis for assigned pathogen		Fresh stool in FecalSwab (แข็งเมือก FecalSwab ส่งหน้าได้ที่ส่วนกลาง)	Room temperature 24 ชม. 2-8 องศา เก็บได้ 48 ชม.* หากเกินเวลาที่กำหนด Sensitivity ของ C. difficile จะลดลง	8,250	In Lab	
Gastrointestinal Pathogen Panel 15 (GPP detect 15 pathogen of virus,Bacteria,parasite)(Rama)	M973	5 days	Bead array		Rectal swab or stool swab in Cary blair transport media // not accept : Stool in Sterile container	2-8 °C	4,000	Out Lab	
GC Stain	E200	1 day	Stain and Microscopic Examination		Urethral & vaginal discharge	2-8oC	65	In Lab	
GeneDose for Pharmacogenetics(PTC Laboratory)	MM623	11 days	Microarray		Buccal swab in special kit	Room Temperature	37,300	Out Lab	
Genetic for hemochromatosis(Siriraj)	B005	16 Days	Allele specific amplification (ASA) at common point mutations 4 gene of HFE (H63D, S65C, C282Y, IVS5+1G>A)		EDTA whole blood 10 ml	2-8 °C	5,750	Out Lab	
Genetic profiles for Early-onset Alzheimer's disease (APP,PSEN1 and PSEN2 genes) [BML]	M217	2 months	PCR and direct sequencing of - Exon 16 and exon 17 of APP gene - Exon 5, 6, 7, 8 and 12 of PSEN1 gene and - Exon 4, 5, 6, 7, 9, 11 and 12 of PSEN2 gene which are hotspot for early-onset AD mutations.		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	65,000	In Lab	
Genetic profiles for Early-onset Alzheimer's disease (APP,PSEN1 and PSEN2 genes) [BML] (STAT)	M218	1 month	PCR and direct sequencing of - Exon 16 and exon 17 of APP gene - Exon 5, 6, 7, 8 and 12 of PSEN1 gene and - Exon 4, 5, 6, 7, 9, 11 and 12 of PSEN2 gene which are hotspot for early-onset AD mutations.		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	85,000	In Lab	
Genetic Selected Panel (Invitae; USA)	MM082	21 days	NGS		EDTA Blood 6-10 ml ค่า Panel + Request form + Clinical history	Room temperature 48 hr 2-8oC one week STORAGE & STABILITY (จาก web invitae) We recommend using overnight shipping the same day that the blood is collected. - Blood can be kept at room temperature for up to 48 hours. - We request that blood is refrigerated no longer than two weeks. - Please do not freeze blood as deletion/duplication analysis is not supported for frozen or partially frozen blood.	50,085	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Genetic testing for Chromosome-Abnormality-Induced Miscarriage : Chromosome aneuploidy (BGI)	B257	No defined TAT			1. EDTA whole blood(Maternal blood) 5 ml 2.Aborted or Induced Labor Tissues (contains at least 100mg of embryonic tissues or chorionic villi or fetal tissue) 3.Chorionic Villi or Fetal Tissue Sample 100mg in a sterile plastic tube after rinsing with physiological saline	tissue samples should be kept and transported at -200 C (Dry ice)	27,500	Out Lab	
Genetic testing for Chromosome-Abnormality-Induced Miscarriage : Chromosome aneuploidy and >5M deletion / duplication (BGI)	B591	No defined TAT			1. EDTA whole blood(Maternal blood) 5 ml 2.Aborted or Induced Labor Tissues (contains at least 100mg of embryonic tissues or chorionic villi or fetal tissue) 3.Chorionic Villi or Fetal Tissue Sample 100mg in a sterile plastic tube after rinsing with physiological saline	tissue samples should be kept and transported at -200 C (Dry ice)	35,500	Out Lab	
Genosense-Allergy Sensor (Blood)(Genosense)	C208	35 Days			Blood (Genosense kit)	room temp	24,000	Out Lab	
Genosense-Baby Sensor 100+ (Urine)(Genosense)	B594	35 Days			Urine (Genosense kit)	room temp	16,000	Out Lab	
Genosense-Cardiovascular Sensor(Genosense)	B323	35 days			buccal swab (Genosense kit)	room temp	20,000	Out Lab	
Genosense-Fem Sensor Pregnancy(Genosense)	B255	35 days			buccal swab (Genosense kit)	room temp	18,000	Out Lab	
Gentamicin (Rama)	V116	1 day	Immunoassay		Clotted blood 5 ml	2-8 °C	580	Out Lab	
GGT (Gamma GT)	C590	1 day	L-Gamma-glutamyl-3-carboxy-4-nitroanilide Substrate (Non-IFCC)	Female 7 – 32 U/L Male 11 – 50 U/L	serum 1 ml	2-8 °C	130	In Lab	/
GI Effects Comprehensive Profile (Thai cell Fix)	C831	23 days	PCR, culture, and microscopic methods		Stool in special kit	2-8 oC stability 48 h.	42,980	Out Lab	
GI Effects Microbial Ecology Profile (Thai cell Fix)	C832	23 days	PCR, culture, and microscopic methods		Stool in special kit	2-8 oC stability 48 h.	26,460	Out Lab	
Glucagon, Plasma (Mayo)	N354	14 Days	Immunoassay Following Extraction		EDTA plasma 2 ml (Fasting)	Frozen : stability 90 Days	12,900	Out Lab	
Glucose (CSF)	C665	1 day	Enzymatic (Hexokinase/G-6-PDH)	40 - 70 mg/dL	CSF 1 ml	2-8 °C	60	In Lab	
Glucose (Fasting)	C040	1 day	Enzymatic (Hexokinase/G-6-PDH)	70 - 99 mg/dl	NaF Plasma or Serum 1 ml	2-8 °C	60	In Lab	/
Glucose (Fluid)	C710	1 day	Enzymatic (Hexokinase/G-6-PDH)		Body fluid 1 ml or Urine 5 ml	2-8 °C	60	In Lab	/
Glucose (Random)	C030	1 day	Enzymatic (Hexokinase/G-6-PDH)	ไม่มี reference range	serum 1 ml	2-8 °C	60	In Lab	
Glutathione (HPLC)	S007	within 7 days	HPLC	Free Glutathione(GSH) : 150-460 mg/L Glutathione disulfide(GSSG) :15-90 mg/L GSH/GSSG ratio (by mole) :10-15	EDTA whole blood 1 ml	Light protected at 2-8 °C	2,800	In Lab	
Glycated Hb (HbA1c)	C880	1 day	Alinity c (Enzymatic)		EDTA Blood 2 ml	2-8 °C	300	In Lab	/
Glycated Hb (HbA1c) and Glycomark (1,5 anhydroglucitol)	C772	1 day	HbA1c : Turbidimetric inhibition immunoassay (TINIA) Glycomark(1,5 anhydroglucitol) :Enzymatic method		EDTA Blood 2 ml พร้อมเก็บ serum 1 ml	2 - 8 °C	900	In Lab	
Glycomark(1,5 anhydroglucitol)	C220	1 day	Enzymatic method	Males 10.7-32.0 µg/mL Females 6.8-29.3 µg/mL	serum 1 ml	2 - 8 C up to 1 week	850	In Lab	
GNAS1_Mutation Analysis [Siriraj]	B441	60 Days	polymerase chain reaction (PCR) 13 exons of GNAS1 gene and detect with direct DNA sequencing		EDTA whole blood 10 ml	2-8 °C	9,200	Out Lab	
Gnathostoma Ab (Siriraj)	P899	11 days	ELISA / Immunoblot		Serum 2 ml. or CSF 3-5 mL	2-8 °C	1,500	Out Lab	
Gnathostoma antibody(Tropmed)	P711	16 days	immunoblot		serum 1 ml or CSF 1 ml	2-8 °C	700	Out Lab	
Gonadotropin Releasing Hormone (Gn-RH)(Mayo)	N355	12 Days	Direct Radioimmunoassay (RIA)	Males: 4.0 - 8.0 pg/mL Females: 2.0 - 10.0 pg/mL	Serum 3 ml	Frozen : Stability 90 Days	23,900	Out Lab	
Gram's Stain	E220	1 day	Stain and Microscopic Examination		All sterile specimen	2-8oC	65	In Lab	/
GRN mutations for frontotemporal dementia [BML]	M358	21 days	PCR and direct sequencing		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	22,000	In Lab	
Group B Streptococcus (Rapid screening test)	N341	1 day	Immunochromatography	Negative	Vagina swab	2-8 °C	360	In Lab	
Group B streptococcus culture & susceptibility	E903	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		Vagina swab or rectal swab in stuart's transport media	2-8 °C	300	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Group B Streptococcus PCR [BML]	M275	3 days	Direct detection by amplification of GBS SIP gene with external control (bacteriophage)		Vaginal-Rectal swab in Amies or Stuart transport medium	2-8oC 48 Hours; Room temperature 1 day	2,045	In Lab	
Group B Streptococcus PCR Reflex Culture & Susceptibility [BML]	M276	3 days for PCR (within 5 days for complete result in GBS positive sample)	Real-time PCR by ARIES® GBS Assay for Group B Streptococcus cfb gene (same as M275) Culture and susceptibility test by Vitek II compact (same as E903)		Vaginal-Rectal swab in Stuart transport medium	2-30oC	2,285	In Lab	
Growth Hormone (24 hr-urine)(BioStem)	C675	23 days	N/A		urine 24 hours , no preservative (minimum volume = 10 ml) collected in speceal kit	2-8 °C	5,000	Out Lab	
Growth Hormone-Releasing Hormone(GH-RH)(Mayo)	N340	18 Days	Direct Radioimmunoassay (RIA)	Levels of IR-GH-RH Baseline range: 5-18 pg/mL Levels in GH-RH Dysfunction: Patients with acromegaly: up to 200 pg/mL Patients with small cell lung carcinoma: up to 50 pg/mL GH-RH secreting tumors: 200-10,000 pg/mL	Serum 3 mL or EDTA plasma 3 mL (Fasting 8 hours) ,frozen	Freeze	23,800	Out Lab	
Growth Hormones	N249	2 days	chemiluminescence	Male <3.00 ng/ml Female <8.00 ng/ml	serum 1 ml (Fasting)	2-8 °C	600	In Lab	/
Gut Immunology (Stool) 224 (Thai cell Fix)	N188	17 Days			40ml Stool in white top cup (for Add-ons)	X	18,250	Out Lab	
H7N9 PCR (DMSC)	H141	7 days	RT PCR		Nasopharyngeal aspirate or swab (in Flu VTM) or throat swab (in Flu VTM)	2-8 °C	4,000	Out Lab	
H7N9 PCR (Rama)	H142	2 days	Realtime PCR		Nasopharyngeal aspirate or swab (in Flu VTM) or throat swab (in Flu VTM) , do not collect in Sterile NSS	2-8 °C	3,000	Out Lab	
Haemo for TB Culture(OPD)	E091	42 days (in case of no growth)	Culture=Automate (Hemo) AST=Conventional		Blood Culture in TB Hemo bottle	Room temperature	600	In Lab	
Haemochromatosis Type 1 (HFE gene) [Rama]	B435	30 days	DNA sequencing		EDTA whole blood 5 ml (Minimun Vol 5 ml.)	2-8 °C	6,800	Out Lab	
Haemochromatosis Type 4 (Ferroportin disease) [Rama]	B436	30 days	DNA sequencing		EDTA whole blood 5 ml (Minimun Vol 5 ml.)	2-8 °C	9,000	Out Lab	
Haemophilus influenzae serotype (DMSC)	E412	30 Days	PCR	-	pure colonies of Haemophilus influenza on chocolate agar	37 oc	1,500	Out Lab	
Haptoglobin	A630	1 day	Immunoturbidimetric assay	(0.300 - 2.000 g/L)	serum 1 ml	2-8 °C	500	In Lab	/
Harmony™ Prenatal Test (N Health)	MM797	12 days			Maternal whole blood 20 ml in streck tube	Room Temperature (18-25oC), Stability = 7 days (from blood collection to arrival at USA subcontract)	16,000	Out Lab	
Harmony™ Prenatal Test plus 22q11.2 Microdeletion (N Health)	MM798	12 days			Maternal whole blood 20 ml in streck tube	Room Temperature (20-30oC), Stability = 7 days (from blood collection to arrival at USA subcontract)	19,000	Out Lab	
HAV RNA (RT-PCR) (DMSC)	H170	11 days	RT PCR	-	serum 2 ml or Water 2 L or Stool 5-10 gm in sterile container	Freeze	1,700	Out Lab	
Hb Constant Spring(Siriraj)	A750	23 days	multiplex ARMS PCR		EDTA whole blood 5 ml	2-8 °C	1,710	Out Lab	
HbeAg (Roche coupon)	N619	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	400	In Lab	
HBS Ag (Quantitative)	N375	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	1,400	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
HBV Genotype and Drug Resistance (Direct sequencing) [BML]	M147	14 days	PCR and direct sequencing of HBV reverse transcriptase gene, then compare sequence with stanford HBV drug resistance database (Stanford and MaxPlack database)		EDTA plasma or serum 1 mL Specimens should contain a minimum hepatitis B DNA viral load of 2000 IU/ml	2-8°C (Separate plasma within 6 hours of collection)	4,200	In Lab	/
HBV PCR (Qualitative)	M040	3 days	Real-time PCR (Taqman probe) for polymerase gene of HBV		EDTA plasma or serum 1 mL	2-8°C (Separate plasma within 6 hours of collection)	1,900	In Lab	
HCV Genotype (Direct Sequence) [BML]	M180	14 days	RT-Nested PCR and direct sequencing of HCV 5'UTR and core region, then compare the sequence with database.		EDTA plasma or serum 1 mL Specimens should contain a minimum hepatitis C viral load of 1,000 IU/ml (Last updated 07/08/2018) (Please attach the recent HCV viral load result)	-Separate serum or plasma within 6 hours of collection. - Serum or plasma specimens may be stored at 2-8°C for up to 3 days or frozen at -70°C or colder for up to 6 weeks.	4000.00	In Lab	
HCV Genotype (LiPA) [BML]	M181	7 days	Reverse transcribe and amplify HCV 5'UTR region (and also NS3 for type 1a/b) and genotype by dot blot hybridization method		EDTA plasma or serum 1 mL Specimens should contain a minimum hepatitis C viral load of 1,000 IU/mL (Please attach the recent HCV viral load result) (Last updated 08/06/2560)	-Separate serum or plasma within 6 hours of collection. - Serum or plasma specimens may be stored at 2-8°C for up to 3 days or frozen at -70°C or colder for up to 6 weeks.	5500.00	In Lab	/
HCV PCR (Qualitative)	M050	3 days	Real-time RT-PCR (Taqman probe) for 5'UTR region of HCV		EDTA plasma or serum 1 mL	2-8°C (Separate plasma within 6 hours of collection)	2,000	In Lab	
HDL-Cholesterol (BGH,BNH)	C062	1 day	Homogeneous enzymatic colorimetric test	Female > 50 mg/dl ; Male > 40 mg/dl	serum 1 ml	2-8 °C	150	In Lab	/
HDV (Hepatitis delta virus) PCR [Rama]	H016	3 days	Real time PCR		EDTA plasma 2 ml	Freeze	2,200	Out Lab	
HDV antibody	P006	4 days	ELISA	Negative	serum 1 ml	2-8oC	500	In Lab	
HE4 (plus CA125)(Abbott)	N432	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	3,500	In Lab	
Health & Cancer Insight (ThaiStemLife)	M738	6 weeks			Buccal swab (in special test kit)	Room Temp.	33,440	Out Lab	
Health Conditions DNA Insight (ThaiStemLife)	B587	42 Days			Buccal swab (in special test kit)	-special kit -Read instructions inside package before collecting	34,000	Out Lab	
Hearing loss panel(LMGG)	MM073	3 months	NGS		EDTA whole blood 6 ml	2-8 °C	71,400	Out Lab	
Heinz Body	A510	2 days	Microscopic examination	Negative	EDTA Blood 2 ml	2-8oC	200	In Lab	
Helicobacter Pylori Ag screening	P298	1 day	Immunochromatography	Negative / Positive	stool 2 ml or 2 gram	2-8 °C	500	In Lab	
Helicobacter pylori Culture/Sensitivity(Bumrungrad International Hospital)	E455	16 days	culture under special condition	-	Gastric Mucosal Biopsy(in sterile NSS)	2-8 °C	3,540	Out Lab	
Helicobacter pylori IgG	P295	4 days	ELISA	<16 RU/mL = Negative >=16 to <22 RU/mL = Borderline >= 22 RU/mL = Positive	serum 1 ml	2-8oC	350	In Lab	/
Helicobacter pylori IgG (with Current infection marker) screening	P109	1 day	Immunochromatography	ไม่พบ	Serum 1 ml	Serum can be stored at 2 - 8 C up to 7 days	380	In Lab	
Helicobacter pylori IgM	P300	4 days	ELISA	Negative	serum 1 ml	2-8oC	500	In Lab	
Helicobacter pylori total antibody	P055	1 hr	Immunochromatography		Serum or Plasma or Whole blood	Serum or plasma : 2-8 C up to 1 week Whole blood : 2-8 C up to 3 days	270	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Hematocrit	A190	1 day	Hydrodynamic Focusing Direct Current Method	F/M 0 - 3d 45 – 67 % F/M 4d - 7d 42 – 66 % F/M 8d - 14d 39 – 63 % F/M 15d - 30d 31 – 55 % F/M 31d - 60d 28 – 42 % F/M 61d - 180d 29 – 41 % F/M 181d - 2y 33 – 39 % F/M 2.001y - 6y 34 – 40 % F/M 6.001y - 12y 35 – 45 % F 12.001y - 18y 36 – 46 % M 12.001y - 18y 37 – 49 % F >18y 36 -48 % M >18y 40 – 54 %	EDTA Blood 2 ml	2-8 °C	60	In Lab	
Hemo Culture & Sensitivity(OPD)	E300	3-5 days	Automate (Bactec FX)		Blood Culture (volume as defined on bottles)	Room temp	300	In Lab	/
Hemo for Fungus culture	E628	30 Days	Culture and Sensitivity Test		Blood culture in BACTEC Myco /F Lytic bottle	Room Temperature	680	In Lab	
Hemoculture bottle 1 bottle	E308	1 day	Bactec		Bottle	Room temperature	120	In Lab	
Hemoculture bottle 10 bottles	E623	1 day	Bactec		bottle	Room temperature	1,200	In Lab	
Hemoculture bottle 2 bottles	E309	1 day	Bactec		bottle	Room temperature	240	In Lab	
Hemoculture bottle 20 bottles	E624	1 day	Bactec		bottle	Room temperature	2,400	In Lab	
Hemoculture bottle 3 bottles	E311	1 day	Bactec		bottle	Room temperature	360	In Lab	
Hemoculture bottle 5 bottles	E622	1 day	Bactec		bottle	Room Temperature	600	In Lab	
Hemoculture for Anaerobe bottle 1 bottle(ค่าขาด)	E101	1 day	Bactec		bottle	Room Temperature	120	In Lab	
Hemoculture for TB bottle 1 bottle	E620	1 day	Bactec		bottle	Room temperature	220	In Lab	
Hemoculture for TB bottle 2 bottles	E621	1 day	Bactec		bottle	Room temperature	440	In Lab	
Hemoglobin	A180	1 day	SLS-hemoglobin method		EDTA Blood 2 ml	2-8oC,6 hrs.	60	In Lab	
Hemoglobin Typing	A625	2 days	ELP		EDTA Blood 2 ml	2-8oC , 5 Days	300	In Lab	/
Hemoglobin Typing (Chula)	A626	23 days	HPLC and Electrophoresis		EDTA whole blood 3 ml	2-8 °C	840	Out Lab	
Hemolytic Complement(CH50)(BPL)	T040	5 days	Hemolytic assay	Normal range 20-40 U/ml	serum 1-2 ml	Frozen	1,000	Out Lab	
Hemophilia A (f8)_INT22 Inverion (Siriraj)	B063	30 Days	Inverse- polymerase chain reaction (I-PCR) method ตามด้วย agarose gel electrophoresis		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	2,500	Out Lab	
Hemosiderin(Rama)	D160	8 days	staining	-	Fresh urine 30 ml. (min 20 ml.)	2-8 °C	280	Out Lab	
Hepatitis A Antibody (IgG+ IgM)(Total)	N650	1 day	Electrochemiluminescence immunoassay “ECLIA”		serum 1 ml หมายถึง ไม่รับตรวจจาก Li-heparin plasma และ Na-heparin plasma เนื่องจากพบว่า ค่า recovery ในสิ่งส่งตรวจทั้ง 2 ชนิดนี้ ต่ำกว่าใน serum ประมาณ 35% ซึ่งอาจจะทำให้การแปลผล ในช่วงค่าที่ใกล้กับ cut-off (20 IU/L) ผิดพลาดไป (update 17/02/2017)	2-8 °C	350	In Lab	
Hepatitis A Antibody (IgM)	N655	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	500	In Lab	/
Hepatitis B antibody (Rapid test)	N646	1 hr	Immunochromatography	Negative / Positive	Serum 1 ml	2 - 8 C up to 3 days .	200	In Lab	
Hepatitis B Core Antibody (HBcAb, Anti-HBc)	N630	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	200	In Lab	/
Hepatitis B Core IgM Antibody	N635	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	500	In Lab	/
Hepatitis B surface Antibody (HBsAb, Anti-HBs)	N625	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	200	In Lab	/
Hepatitis B surface Antigen	N620	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	150	In Lab	/
Hepatitis Be Antibody	N645	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	350	In Lab	/
Hepatitis Be Antigen	N640	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	400	In Lab	/
Hepatitis C Antibody	N660	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	290	In Lab	/
Hepatitis C antibody (Rapid test)	N647	1 hr	Immunochromatography	Negative / Positive	Serum 1 ml	2 - 8 C up to 3 days	300	In Lab	
Hepatitis C Antigen (HCV Ag)	N649	1 day	Chemiluminescent microparticle immunoassay (CMIA)	Interpretation of Results Concentration Value Interpretation < 3.00 fmol/L Nonreactive for HCV Ag ≥ 3.00 fmol/L Reactive for HCV Ag	serum 1 ml	2-8 °C	1,495	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Hepatitis E RNA (RT-PCR) (Chula)	MM742	5 Days	Real-Time Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)		1. Serum 2 ml or 2. Stool 3 mL	4 C (Stability 2 Days)	2,130	Out Lab	
Hepatitis E Virus Antibody IgG (Anti HEV IgG)	N661	4 days	ELISA	Negative	serum 1 ml	2-8oC	375	In Lab	
Hepatitis E Virus Antibody IgM (Anti HEV IgM)	N662	4 days	ELISA	Negative	serum 1 ml or(EDTA , heparin or citrate plasma ,minimum 300 ul)	2-8oC	350	In Lab	
HER2 gene (FISH) (Rama)	B325	16 days	FISH	N/A	tissue in parafin block	room temp	11,500	Out Lab	
Hereditary Breast and Ovarian Cancer (BRIA)	M762	2 months	Chip capture and Next generation sequencing		EDTA whole blood 5 ml	2-8 °C	38,000	Out Lab	
Hereditary Breast and Ovarian Cancer (Integrated BRACAnalysis)(ATLANTA)	M764	1 month	Full sequence and large rearrangement analysis of BRCA1, BRCA2		EDTA whole blood 10 ml	Transport at room temperature	132,000	Out Lab	
Hereditary Breast Cancer (BRIA)	M752	2 months	Chip capture and Next generation sequencing		EDTA whole blood 5 ml	2-8 °C	38,000	Out Lab	
Hereditary cancer screening panel (LMGG)	MM639	4 weeks	Not informed	N/A	EDTA whole blood 6 ml	2-8 °C	71,400	Out Lab	
Hereditary cancer syndromes (NGS)(Invitae; USA)	M963	30 Days	Genomic DNA obtained from the submitted sample is enriched for targeted regions using a hybridization-based protocol, and sequenced using Illumina NGS technology. Reads are aligned to the reference sequence (GRCh37), and sequence changes are identified and interpreted in the context of a single clinically relevant transcript. 84 Genes: AIP, ALK, APC, ATM, AXIN2, BAP1, BARD1, BLM, BMPR1A, BRCA1, BRCA2, BRIP1, CASR, CDC73, CDH1, CDK4, CDKN1B, CDKN1C, CDKN2A, CEBPA, CHEK2, CTNNA1, DICER1, DIS3L2, EGFR, EPCAM, FH, FLCN, GATA2, GPC3, GREM1, HOXB13, HRAS, KIT, MAX, MEN1, MET, MITF, MLH1, MSH2, MSH3, MSH6, MUTYH, NBN, NF1, NF2, NTHL1, PALB2, PDGFRA, PHOX2B, PMS2, POLD1, POLE, POT1, PRKAR1A, PTCH1, PTEN, RAD50, RAD51C, RAD51D, RB1, RECQL4, RET, RUNX1, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TERC, TERT, TMEM127, TP53, TSC1, TSC2, VHL, WRN, WT1		EDTA Blood 6-10 ml + Request form + Clinical history (using only Invitae's kit)	Room temperature (for 48 hr.) 2-8 °C (for one week)	40,635	Out Lab	
Hereditary colorectal cancer screening panel (LMGG)	MM640	4 weeks	Not informed	N/A	EDTA whole blood 6 ml	2-8 °C	71,400	Out Lab	
Hereditary hearing loss (GJB/Connexin26)(LMGG)	MM961	30 days	Next Generation Sequencing of Connexin 26 (GJB protein)		EDTA blood 6 ml	2-8 °C	9,125	Out Lab	
Hereditary hearing loss (GJB1 protein/Connexin32)(LMGG)	MM072	30 days	Next Generation Sequencing of Connexin 32 (GJB1 protein)		EDTA whole blood 6 ml	2-8 °C	9,125	Out Lab	
Hereditary nonpolyposis colon cancer, type 8 (sequence analysis of EPCAM gene)(CGC genetics)	M658	67 days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	42,000	Out Lab	
Hereditary nonpolyposis colorectal cancer (HNPCC sequence analysis of MSH6 gene)(CGC genetics)	MM758	67 Days	Sanger		EDTA whole blood 3 ml	Room temp. (20-25 °C)	41,400	Out Lab	
Hereditary Non-polyposis Colorectal Cancer, HNPCC (sequence analysis of MLH1 gene)(CGC genetics)	M622	67 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	52,000	Out Lab	
Hereditary Non-polyposis Colorectal Cancer, HNPCC (sequence analysis of MSH2 gene)(CGC genetics)	M623	67 days	Sanger		EDTA whole blood 3 ml	Room temp. (20-25 °C)	43,000	Out Lab	
Hereditary Ovarian Cancer (BRIA)	M751	2 months	Chip capture and Next generation sequencing		EDTA whole blood 5 ml	2-8 °C	38,000	Out Lab	
Herigen(Genetic Cancer Risk Test) Plus GeneInsight Combo (NutriFit+TotalHealth) (Thai StemLife)	MM627	8 weeks	Next-generation sequencing-based test for 25 hereditary cancers susceptibility genes (98 genes included) For TotalHealthGeneInsight uses Next Generation Sequencing (Illumina) and Microarray (Affymetrix)		Send both 1. Thai StemLife HeriGen Saliva in Special Collection Kit (Use 2 ml Saliva) and; 2. TotalHealth GeneInsight Buccal Swab in Special Collection Kit (Take all medications as prescribed and do not eat, drink, smoke, chew gum, floss, or brush your teeth for 30 minutes prior to the saliva collection.)	Store at ambient temperature (18-25° C). Do NOT refrigerate or freeze	95,010	Out Lab	
Herigen(Genetic Cancer Risk Test)(Thai StemLife)	MM626	8 weeks	Next-generation sequencing-based test for 25 hereditary cancers susceptibility genes (98 genes included)		Thai StemLife HeriGen Saliva in Special Collection Kit (Use 2 ml Saliva) (Take all medications as prescribed and do not eat, drink, smoke, chew gum, floss, or brush your teeth for 30 minutes prior to the saliva collection.)	Store at ambient temperature (18-25° C). Do NOT refrigerate or freeze	53,135	Out Lab	
Herpes group identification (Siriraj)	H107	3 days	Multiplex PCR and Microarray		CSF 1 ml or Eye tapping /Vitreous / Eye aqueous 200 ul.	2-8 °C	6,800	Out Lab	
Herpes Simplex Virus (HSV) PCR	M160	3 days	Multiplex Real-time PCR		EDTA Plasma or serum 1 mL / CSF 500 uL / Vesicle fluid / Lesion swab / Sputum (Update: 18/10/2019)	2-8°C	1,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Herpes Simplex Virus (HSV) PCR (With Type)	M161	3 days	Multiplex Real-time PCR		EDTA Plasma or serum 1 mL / CSF 500 uL / Vesicle fluid / Lesion swab / Sputum (Update: 18/10/2019)	2-8°C	3,000	In Lab	
Herpes Simplex Virus (HSV):antigen (Siriraj)	N015	5 days	Immunofluorescent assay		Lesion smear on 2 glass slides ,Remark position of lesion,Vesicular scrape, eye scrape ,nasopharyngeal aspirate/wash ,tracheal suction,Sputum and tissue in viral transport media (VTM), BAL in sterile container	2-8 °C	800	Out Lab	
Herpes Simplex Virus isolation (Siriraj)	P722	11 days	Cell culture isolation & identification		Vesicle fluid, lesion swab, genital swab, eye swab, nasopharyngeal aspirate/wash, tissue in Container Viral transport media (VTM) - BAL in sterline container , -CSF in sterline container , 1 ml	2-8 °C	1,280	Out Lab	
Herpes Simplex Virus isolation(Chula)	H161	7 days	Cell culture and Indirect Immunofluorescence Assay		Swab from lesion (swab from lesion such as eye swab, skin lesion swab) in HSV transport media or CSF 1 ml	2-8 °C (stability 2 days)	950	Out Lab	
Herpes Simplex Virus(HSV)-infected cell Ag(Chula)	H162	7 days	Indirect Immunofluorescence Assay		Cell from lesion in slide 2 slides	2-8 °C (stability 2 days)	500	Out Lab	
Herpes viruses 7 in one (Rama)	M712	4 days	Multiplex PCR (Abbott)	N/A	CSF 500 ul or Eye tapping 0.2 ml or Vitreous 0.2 ml or Eye aqueous 0.2 ml or Bronchoalveolar lavage fluid 500 ul Mid stream urine (MSU) 1 ml EDTA whole Blood 6 ml. or EDTA plasma 1 mL(Sent to subcontract within 6 hrs after blood collecting)	2-8 °C	4,000	Out Lab	
Herpesviruses 3 in 1 (HSV1/2 and VZV) [BML]	M132	3 days	Multiplex Real-time PCR		EDTA Plasma or serum 1 mL / CSF 500 uL / Vesicle fluid / Lesion swab / Sputum (Update: 18/10/2019)	2-8°C (Separate plasma within 6 hours of collection)	3,000	In Lab	
Herpesviruses 5 in 1 (HSV1/2, VZV, EBV and CMV) [BML]	M133	3 days	Multiplex Real-time PCR		EDTA Plasma or serum 1 mL / CSF 500 uL / Vesicle fluid / Lesion swab / Sputum (Update: 18/10/2019)	2-8°C (Separate plasma within 6 hours of collection)	3,500	In Lab	
Herpesviruses 7 in 1 [BML]	M134	3 days	Multiplex Real-time PCR		EDTA Plasma or serum 1 mL / CSF 500 uL / Vesicle fluid / Lesion swab / Sputum (Update: 18/10/2019)	2-8°C (Separate plasma within 6 hours of collection)	4,000	In Lab	
Heterophile Antibody	T100	2 days	Latex agglutination		serum 1 ml	2-8 °C	250	In Lab	
Hexokinase(HK)(Siriraj)	C979	11 days	Kinetic method		EDTA whole blood 3 mL	2-8 oC , stability 24 hours	2,200	Out Lab	
Histoplasma antibody(Rama)	P710	5 days	immunodiffusion		serum 1 ml	2-8 °C	520	Out Lab	
HIT antibody confirm (Chula)	N973	20 days	platelet aggregation		Citrate plasma 3 ml,2 tube	Frozen (-80 °C stability 30 days,-20 °C stability 7 days)	1,875	Out Lab	
HIT antibody screening (Platelet Factor 4 Antibody)(Chula)	N317	5 days	IgG Immuno Assay		serum 2 ml	2-8 °C : stability 48 hrs, Frozen	2,200	Out Lab	
HIV Antibody	X010	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml Plasma : Li-heparin, Na-heparin, K2-EDTA, K3-EDTA 1 ml	2-8oC	250	In Lab	/
HIV Antigen	X001	1 day	Electrochemiluminescence immunoassay (ECLIA)		serum 1 ml	2-8oC	450	In Lab	/
HIV PCR for Sperm wash	M009	3 days	Real-time RT-PCR (Taqman probe)		Sperm wash ≥ 0.5 mL	2-8°C	4,500	In Lab	
HIV Viral Load (Anonymous Clinic(TRC))	X081	11 days	PCR		EDTA plasma 2 ml , frozen	Frozen	2,070	Out Lab	
HIV Viral Load (Quantitative) [BML]	M020	5 days	COBAS Ampliprep/COBAS TaqMan 48		EDTA plasma 2 mL	2-8°C (Separate plasma within 24 hours of collection)	3,500	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
HIV-1 drug resistance (Integrase Inhibitor) [BML]	M139	14 days	RT-Nested PCR and direct sequencing of integrase region, then compare the sequence with Stanford database.		EDTA plasma 2 mL Specimens should contain a minimum HIV viral load of 1000 copies/mL	2-8°C (Separate plasma within 6 hours of collection)	4,900	In Lab	/
HIV-1 drug resistance (PI+RTI)	M140	14 days	RT-Nested PCR and direct sequencing of protease and reverse transcriptase region, then compare the sequence with Stanford database.		EDTA plasma 2 mL Specimens should contain a minimum HIV viral load of 1000 copies/mL	2-8°C (Separate plasma within 6 hours of collection)	10,000	In Lab	/
HIV-1 drug resistance (PI+RTI+INI)	M142	8 days	RT-Nested PCR and direct sequencing of protease, reverse transcriptase and integrase region, then compare the sequence with Stanford database.		EDTA plasma 2 mL Specimens should contain a minimum HIV viral load of 1000 copies/mL	2-8°C (Separate plasma within 6 hours of collection)	14,500	In Lab	/
HIV-1 drug resistance (Protease inhibitor) [BML]	M137	14 days	RT-Nested PCR and direct sequencing of protease region, then compare the sequence with Stanford database.		EDTA plasma 2 mL Specimens should contain a minimum HIV viral load of 1000 copies/mL	2-8°C (Separate plasma within 6 hours of collection)	4,900	In Lab	/
HIV-1 drug resistance (Reverse transcriptase inhibitor) [BML]	M138	14 days	RT-Nested PCR and direct sequencing of reverse transcriptase region, then compare the sequence with Stanford database.		EDTA plasma 2 mL Specimens should contain a minimum HIV viral load of 1000 copies/mL	2-8°C (Separate plasma within 6 hours of collection)	4,900	In Lab	/
HIV-1 PCR (Qualitative)	M010	3 days	Real-time RT-PCR (Taqman probe)		EDTA plasma 1 mL CSF ≥ 0.5 mL *** หากต้องการส่ง CSF โปรดติดต่อ BML ก่อนทุกครั้ง***	2-8°C (Separate plasma within 6 hours of collection)	2,000	In Lab	
HIV-1 Proviral Drug Resistant for ultralow viral load (PI) [BML]	M174	10 days	Nested PCR and direct sequencing of protease region, then compare the sequence with Stanford database.		EDTA BLOOD 3-5 ml (With HIV-1 RNA viral load between less than 20 - 1,000 copies/ml)	2-8oC (3 Days) (Do not freeze)	4,900	In Lab	
HIV-1 Proviral Drug Resistant for ultralow viral load (PI+RTI) [BML]	M176	10 days	Nested PCR and direct sequencing of protease region, then compare the sequence with Stanford database.		EDTA BLOOD 3-5 ml (With HIV-1 RNA viral load between less than 20 - 1,000 copies/ml)	2-8oC (3 Days) (Do not freeze)	10,000	In Lab	
HIV-1 Proviral Drug Resistant for ultralow viral load (RTI) [BML]	M175	10 days	Nested PCR and direct sequencing of protease region, then compare the sequence with Stanford database.		EDTA BLOOD 3-5 ml (With HIV-1 RNA viral load between less than 20 - 1,000 copies/ml)	2-8°C DO NOT FREEZE!!!	4,900	In Lab	
HIV-2 RNA Qualitative [Siriraj]	X097	8 days	Real Time PCR		EDTA Plasma 1-2 ml.	Freeze	1,670	Out Lab	
HLA B51 (TRC)	L111	9 days	PCR SSO (Sequencing Specific Oligonucleotide)	N/A	EDTA whole blood 3 ml	2-8 °C	5,600	Out Lab	
HLA-A*3101 for Carbamazepine (For Japanese, Korean and Caucasian) [BML]	M323	3 Days	Real time SSP-PCR		EDTA Blood 3-5 ml	Room temperature 24 Hr 2-8oC 1 month	1,500	In Lab	
HLA-B*1502 and HLA-A*3101 for Carbamazepine (All Ethnic) [BML]	M324	3 Days	Real-time SSP-PCR		EDTA Blood 3-5 ml	Room temperature 24 Hr 2-8oC 1 month	2,200	In Lab	
HLA-B*1502 Genotyping (TRC)	L117	14 days	PCR, high resolution	N/A	EDTA whole blood 6 ml	2-8 °C	9,200	Out Lab	
HLA-B*5701 Genotyping (TRC)	L115	14 days	PCR, high resolution	N/A	EDTA whole blood 6 ml	2-8 °C	9,200	Out Lab	
HLA-B*5801 Genotyping (TRC)	L116	21 days	PCR, high resolution	N/A	EDTA whole blood 6 ml	2-8 °C	9,200	Out Lab	
HLA-B27 and B51 PCR [BML]	M052	3 days	Real-time SSP-PCR		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	4,350	In Lab	
HLA-B27 PCR [BML]	M506	3 days	Real-time SSP-PCR	Negative for HLA-B27	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,500	In Lab	/
HLA-B51 PCR [BML]	M051	3 days	Real-time SSP-PCR		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	3,760	In Lab	
HME Antibodies (IgG, IgM)(Quest/diagnostic)	P212	30 Days	Immunofluorescence Assay	Reference Range(s) A. phagocytophilum IgG <1:64 A. phagocytophilum IgM <1:20	serum 2 ml (VOLUME : Standard: 1 mL) Minimum Volume 0.2 mL	Specimen Stability Room temperature: 7 days Refrigerated: 14 days Frozen: 30 days	18,000	Out Lab	
hMPV Antigen Screening	P801	1 day	Immunochromatographic Assay	Negative	Nasopharyngeal swab,Nasal aspirate specimen	2-8 °C	350	In Lab	
HNPCC (MLH1 & MSH2) Mutation [Siriraj]	B047	12 month	polymerase chain reaction (PCR) and screen mutation by denaturing high-performance liquid chromatography (DHPLC) and direct DNA sequencing		EDTA whole blood 10 - 15 ml.	2-8 °C	25,000	Out Lab	
HNPCC (sequence analysis of MLH1 and MSH2 genes)(CGC genetics)	M625	67 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	77,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
HNPCC-MSI Analysis-Tissue (Siraj)	B037	1 month	PCR and DHPLC		- fresh tissue from tumor and matched normal tissue at least 0.3x0.3x0.3 mm3 (~ 50-200 mg) in sterile dry tube or sterile isotonic saline tube or tissue culture medium remark - If cannot sent Fresh tissue immediatly, please keep on -70°C or -20°C (no Formalin) - 6 – 10 ml in standard EDTA tube or ACD tube	blood sample keep on room temp (dr.chanin)	5,750	Out Lab	
Homocysteine	N020	1 day	Chemiluminescent microparticle immunoassay (CMIA)		EDTA plasma or serum 1 ml	2-8 °C	700	In Lab	/
Homovanillic Acid (HVA), Urine-HPLC (24-h Urine)	S202	within 10 days	HPLC	1.82-6.92 mg/24h urine	24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volumn.	Store at 2-8 °C .	2,850	In Lab	/
Horizon Carrier Screen 106 panel(Comprehensive Jewish)(BCC)	MM506	23 Days	• Fragile X CGG Repeat Analysis • Genotyping using MassARRAY® System or Luminex® xMAP® technology • Next Generation Sequencing (NGS) • Multiplex Ligation-Dependent Probe Amplification (MLPA) for Spinal Muscular Atrophy (SMA) and Duchenne Muscular Dystrophy (DMD) • Sanger Sequencing • Enhanced SMA testing		Blood or Saliva	Room Temperature	36,950	Out Lab	
Horizon Carrier Screening Test 4 Panel (CF, SMA, Fragile X, DMD)(BCC)	MM743	23 days	Combined methods including PCR, Sanger's sequencing, NGS and MLPA		EDTA blood in special collection kit	Room Temperature	30,800	Out Lab	
HPFH (Hereditary Persistence of Fetal Hemoglobin)(Chula)	A216	23 days			EDTA whole blood 6 ml	2-8 °C	4,625	Out Lab	
HPV DNA PCR High Risk Testing (Self-Collection)	M343	5 days	Vaginal specimens collected with Evalyn®Brush and detect HPV HR by the cobas® 4800 HPV Test.		Vaginal specimens collected with Evalyn®Brush.	2-30°C for up to 3 days	1,000	In Lab	/
HPV DNA PCR High Risk typing 16/18 plus Genotype(COBAS HPV)	M336	7 days (In case of other high risk HPV detected,the result will be reported on friday)	Real-time PCR (Taqman probe) for 14 HR-HPV Real-time PCR (DPO and TOCE) for HPV28 subtypes (Only 12 Other HR positive)		Cervical specimens collected in cobas® PCR Cell Collection Media, PreservCyt or SurePath. (minimum 5 mL)	Collected in cobas® PCR Cell Collection Media and PreservCyt may be stored at 2-30°C for up to 6 months. Collected in SurePath Preservative Fluid may be stored at 2-8°C for up to 4	2,250	In Lab	
HPV DNA PCR High Risk typing 16/18(COBAS HPV)	M339	5 days	Real-time PCR (Taqman probe) for 14 HR-HPV (Subtyping available only 16 and 18)		Cervical specimens collected in cobas® PCR Cell Collection Media, PreservCyt or SurePath. (minimum 5 mL)	Collected in cobas® PCR Cell Collection Media and PreservCyt may be stored at 2-30°C for up to 6 months. Collected in SurePath Preservative Fluid may be stored at 2-8°C for up to 4	1,250	In Lab	/
HPV Genotype	M455	10 days	Real-time PCR (DPO and TOCE) for HPV28 subtypes (19 High-risk and 9 Low-risk HPV)		Cervical cell collected in liquid based cytology media	2-25°C	4,000	In Lab	
HPV High Risk mRNA Test (APTIMA HPV)	M328	8 days	Transcription-Mediated Amplification (TMA) and Hybridization Protection Assay(HPA) for HPV E6/E7 mRNA		Cervical specimens collected in PreservCyt Solution (minimum 5 mL)	2-30°C for up to 30 days	1,250	In Lab	/
HPV mRNA PCR and C.trachomatis / N.gonorrhoea PCR (Aptima)	M345	8 days	Transcription-Mediated Amplification (TMA) and Hybridization Protection Assay(HPA) for HPV E6/E7 mRNA and CT/GC rRNA		Cervical specimens collected in PreservCyt Solution (minimum 5 mL)	2-30°C for up to 30 days.	3,000	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
HPV Primary Screening (COBAS) [BML]	M523	5 days	The cobas® 4800 HPV Test is based on two major processes: (1) automated specimen preparation to simultaneously extract HPV and cellular DNA; (2) PCR amplification of target DNA sequences using both HPV and β-globin specific complementary primer pairs and real-time detection of cleaved fluorescent-labeled HPV and β-globin specific oligonucleotide detection probes. The concurrent extraction, amplification and detection of β-globin in the cobas® 4800 HPV Test monitors the entire test process.		Cervical specimens collected in cobas® PCR Cell Collection Media, PreservCyt or SurePath. (minimum 5 mL)	Collected in cobas® PCR Cell Collection Media and PreservCyt may be stored at 2-30°C for up to 6 months. Collected in SurePath Preservative Fluid may be stored at 2-8°C for up to 4	1,000	In Lab	/
HPV primary screening self-collection test kit [BML]	M349	7 days	Vaginal specimens collected with Evalyn®Brush and detect HPV HR by the cobas® 4800 HPV Test.		Vaginal specimens collected by Evalyn®Brush.	2-30°C for up to 7 days	1,820	In Lab	/
HPV Self-Collection Brush	M342	x			The Evalyn®Brush is a device developed specially for the retrieval of cell material from the vagina.	2-30°C for up to 3 days	350	In Lab	
HSV 1/2 DNA Quantitative [Chula]	H050	11 days	real time PCR		CSF 1 ml or urine 1 ml or EDTA plasma 1 ml	2-8 °C	2,530	Out Lab	
HSV DNA Detection [Siriraj]	H193	14 Days	Real-time PCR		vesicular fluid, eye scrape, vitreous fluid, Fluid form eye, nose, mouth , CSF	2-8 °C	2,500	Out Lab	
HSV IGG	P745	4 days	ELISA	Negative	serum 1 ml	2-8 °C	350	In Lab	/
HSV IgG IFA titer (CSF) (BPL)	P789	3 days		Negative (<1:4)	CSF 1 - 2ml	2-8 °C	1,250	Out Lab	
HSV IgG IFA titer (serum) (BPL)	P697	3 days	IFA	Negative (<1:100)	serum 1-2 ml (minimum 500 ul)	2-8 °C	1,250	Out Lab	
HSV IGM	P746	4 days	ELISA	Negative	serum 1 ml	2-8 °C	400	In Lab	/
HSV IgM IFA titer (CSF) (BPL)	P788	3 days		Negative (<1:4)	CSF 1- 2ml	2-8 °C	1,250	Out Lab	
HSV IgM IFA titer (serum) (BPL)	P787	3 days		Negative (<1:10)	serum 1- 2 ml	2-8 °C	1,250	Out Lab	
HTLV-1 Antibody (RAMA)	N909	9 days	Particle agglutination	-	serum 1 ml	2-8 °C	460	Out Lab	
Human Herpes Virus (Type 6) PCR (RAMA)	H105	5 days	Realtime PCR		EDTA plasma 2 ml or CSF, urine, body fluid 500 ul	Plasma: Freeze Fluid ; 2-8 °C	1,900	Out Lab	
Human Herpes Virus (Type 8) PCR (RAMA)	H106	3 days	Realtime PCR		EDTA plasma 2 ml or CSF, urine, body fluid 500 ul	Plasma: Freeze Fluid ; 2-8 °C	1,900	Out Lab	
Human herpesvirus type 6 and 7 PCR (HHV6 and HHV7) [BML]	M346	3 days	Real-time RT-PCR (Taqman probe) for U65-U66 genes of Human Herpesvirus 6 and U57 gene of Human Herpesvirus 7		EDTA Plasma or Serum, CSF, Aqueous humor, Wound swab, Urine and Sputum	2-8°C (Separate plasma within 6 hours of collection)	2,000	In Lab	
Huntington (HD) Expansion (Siriraj)	B370	2 months	PCR		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	3,700	Out Lab	
Huntington Disease (HTT gene, detection of expanded CAG triplet-repeat)(CGC genetics)	M626	37 days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	22,000	Out Lab	
HVA (Homovanillic Acid) (Chula)	C922	16 days	HPLC	0-6.2 mg/24 hr	24 Hr Urine (preserved by 12.5 ml of 6N HCl) 50 ml	2-8 °C	870	Out Lab	
Hydrops fetalis Full Screening (WCH, Australia)	C106	3 months			fibroblast culture	ambient	64,900	Out Lab	
Hypercholesterolemia (frequent mutations of APOB gene)(CGC genetics)	M743	37 Days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	16,500	Out Lab	
IDH 1 and IDH2 Mutations (Chula GenePro)	M754	18 days	Amplify IDH1/IDH2 gene with PCR and detect mutations at codon 132/140/172 by pyrosequencing		Tissue in paraffin block + H&E slide + Pathology report	room temp	7,950	Out Lab	
IDH1 and IDH2 Mutations [BML]	M189	10 Days	PCR and direct sequencing of mutations at IDH1 (codon 132) and IDH2 (codon 172)		- Formalin-fixed, paraffin-embedded (FFPE) tissue block ที่ได้รับการ Dx ว่ามีเซลล์มะเร็ง - H&E slide + Pathology report สำหรับ Pathologist review - EDTA Bone marrow หรือ EDTA Blood ก็รับ ถ้าเป็น Leukemia (ถ้าเป็น EDTA Bone marrow/EDTA Blood ไม่ต้อง order R887)	Room temperature and avoid heat	6,500	In Lab	
IgA (Immunoglobulin A) Level	T097	3 days	Nephelometry	Classified by gender and age	serum 1 ml	2-8 °C	350	In Lab	/
IgE (Immunoglobulin E) Level	T090	1 day	Nephelometry	<100 IU/mL	serum 1 ml	2-8 °C	550	In Lab	/
IGF1 (Insulin like Growth hormone Factor)	N745	3 days	chemiluminescence	Classified by gender and age	Serum or Heparin plasma 1 ml (minimum 300 ul)	2-8oC stable for up to 24 hours (stored at -25oC : stable for 12 months)	800	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
IGFBP3	N741	3 days	chemiluminescence	Classified by gender and age	Serum or Heparin plasma 1 ml (minimum 300 ul)	2-8oC stable for up to 24 hours (stored at -25oC : stable for 12 months)	900	In Lab	
IgG (Immunoglobulin G) Level	T095	2 days	Nephelometry	Classified by gender and age	serum 1 ml	2-8 °C	350	In Lab	/
IgG Food Antibodies (87 IgG foods + Total IgE) (Serum)(Thai cell Fix)	J244	14 Days			3ml serum in transfer tube	Freeze	14,750	Out Lab	
IgG4 + Omni Screen (232 allergens)	J232	16 days	ELISA	-	serum 2 ml x 2 tubes (Min Vol. 2 ml)	Freeze	21,000	Out Lab	
IgH Gene (Immunoglobulin Heavy Chain gene) [Siriraj]	B445	23 work days	PCR, Electrophoresis, Hetero duplex analysis and DNA Sequencing or GeneScanning		1.) Fresh tissue or Frozen solid section size 5x5x5 mm. storage in Sterilized microcentrifuge and keep at 0-4 °C all times 2.) Paraffin-embedded tissue size 10 mm. 30 slide storage in Sterilized microcentrifuge 3.) 10% Formalin-fixed tissue size 5x5x5 mm. storage in Sterilized microcentrifuge	0-4 °C	19,500	Out Lab	
IgK Gene rearrangement (Siriraj)	M711	16 Days	PCR, Electrophoresis, Hetero duplex analysis and DNA Sequencing or GeneScanning		1.) Fresh tissue or freeze solid section : 5x5x5 mm. in microcentrifuge (Sterilized) and storage : 0-4 °C 2.) Paraffin-embedded tissue : Sliced thick 10 mm (30 slide) in microcentrifuge (Sterilized) / sent block and slide bacause review report 3.)Formalin-fixed (5x5x5 mm.) (10% formalin 10 : tissue 1) in microcentrifuge	2-8 °C	17,800	Out Lab	
IgM (Immunoglobulin M) Level	T096	3 days	Nephelometry	Classified by gender and age	serum 1 ml	2-8 °C	350	In Lab	/
Immucap BMC Allergy Screening Check up Package (Phadiatop+fx2+fx5)	J399	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	1,860	In Lab	/
Immucap Infant Allergy Screening Package (Phadiatop infant(< 5 years) Profile 19 allergens)	J395	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	2,830	In Lab	/
Immucap Inhalation Allergy Screening Package (Phadiatop Profile 18 allergens)	J377	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	2,100	In Lab	/
ImmunoCAP ISAC panel(TDL,UK)	J148	16 days	ISAC microarray		serum 2 ml	Freeze	31,000	Out Lab	
Immunolectrophoresis (BRIA)	T762	7 days	electrophoresis		serum 1 ml	Frozen (stability Refrigerated 7 days , Frozen 1 months)	2,550	Out Lab	
Immuno-fixation (Chula)	T110	11 days	immuno-fixation electrophoresis		serum 1 ml or 24-hr urine 50 ml (no preservative)	2-8 °C	2,500	Out Lab	
Immuno-fixation (RAMA)	T109	16 days	immuno-fixation electrophoresis		serum 1 ml	2-8 °C	3,300	Out Lab	
Immuno-fixation(Siriraj)	T775	9 Days	immuno-fixation electrophoresis		serum 1 ml , frozen (Not accept Specimen Hemolysis 3+)	Frozen, room temperature stability 8 hrs , Refrigerated stability 5 days , Frozen stability 1 months	3,050	Out Lab	
ImmunoGenomic™ Profile (Buccal Rinse)(Thai cell Fix)	B534	30 Days			Buccal - Two morning collections of mouthwash rinse (10 ml)	x	23,750	Out Lab	
Immunoglobulin IgG subclass	T130	1 day	Nephelometry	Classified by gender and age	serum 1 ml	2-8 °C	4,570	In Lab	
Immunoglobulin IgG subclass 4 (only)(RAMA)	T525	7 days	Nephelometry		serum 1-2 ml	2-8 °C	850	Out Lab	
Immunoglobulin IgG subclass(IgG subclass 1,2,3,4)(RAMA)	T237	7 days	Nephelometry		serum 1-2 ml	2-8oC	2,700	Out Lab	
Immunoglobulins (IgA , IgM , IgG)	T050	3 days	Nephelometry	Classified by gender and age	(immediately separate after collect sample and then freeze at -20 °C)	2-8 °C	1,000	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Immunophenotyping for Acute Leukemia (RAMA)	A823	9 days	Flow cytometry		1. EDTA peripheral blood 5 ml 2. Heparinized peripheral blood 5 ml or 3. Heparinized bone marrow 5 ml + 2 slides of bone marrow smear (Unstain) or 4. EDTA bone marrow	room temp	7,500	Out Lab	
Immunophenotyping for Immune reconstitution panel (RAMA)	A833	9 days	Flow cytometry		1. EDTA peripheral blood 5 ml or 2. EDTA bone marrow 5 ml or 3. Heparinized peripheral blood 5 ml or 4. Heparinized bone marrow 5 ml or 5. other body fluid (WBC > 100 cells/ul) 5 ml in sterile container	room temp	5,375	Out Lab	
Immunophenotyping for Lymphocyte all subset (RAMA)	A215	5 days	Flow cytometry	The normal range by age	EDTA blood 3 ml.	room temp	3,000	Out Lab	
Immunophenotyping for Minimal Residual Disease for Acute Myeloid Leukemia (RAMA)	A824	7 days	Flow cytometry		1. Heparinized or EDTA bone marrow 5 ml + 2 slides of bone marrow smear (Unstain) or 2. Heparinized or EDTA Peripheral blood 5 mL	room temp	7,500	Out Lab	
Immunophenotyping for Minimal Residual Disease for B lymphoblastic leukemia, MRD (RAMA)	A825	9 days	Flow cytometry		1. Heparinized or EDTA bone marrow 5 ml + 2 slides of bone marrow smear (Unstain) or 2. Heparinized or EDTA Peripheral blood 5 mL	room temp	7,500	Out Lab	
Immunophenotyping for Minimal Residual Disease for Multiple myeloma, MM-MRD (RAMA)	A836	5 days	Flow cytometry		Heparinized bone marrow, EDTA bone marrow.	room temp	5,750	Out Lab	
Immunophenotyping for Minimal Residual Disease for T lymphoblastic leukemia, MRD (RAMA)	A822	5 days	Flow cytometry		1. Heparinized or bone marrow 5 ml + 2 slides of bone marrow smear (Unstain) or 2. Heparinized or EDTA Peripheral blood	room temp	5,000	Out Lab	
Immunophenotyping for platelet surface markers panel (CD41/Cd42b/CD61) (RAMA)	A834	9 days	Flow cytometry		1. EDTA peripheral blood 5 ml or 2. Heparinized peripheral blood 5 mL	room temp	3,875	Out Lab	
Immunophenotyping for PNH Clone (RAMA)	A827	8 days	Flow cytometry		EDTA peripheral blood 5 ml or Heparin peripheral blood 5 ml	room temp	4,375	Out Lab	
Inclusion Body	A500	2 days	New methylene blue staining	Negative	EDTA Blood 2 ml	2-8°C - 1 Day	75	In Lab	
India Ink Preparation	D030	1 day	India ink Preparation		Body fluid	2-8 °C	65	In Lab	
Indican Test, Urine (Thai cell Fix)	C571	3 days	Chemistry		5-10 ml of first morning urine	Preservative or Freeze (14/9/16: preservative with in special kit if not Kit , correct specimen with in container and FreeZe speciemen // Mr. DOM Thai cell fix)	750	Out Lab	
In-Direct Coombs Test-IAT-CENTBLOOD	L050	1 day	Column Agglutination		EDTA plasma 1.5 ml and serum 1.5 ml (minimum volume 800 ul)	2-8 °C	200	In Lab	
Infectious Mononucleosis	P285	1 day	Latex agglutination		serum 1 ml	2-8 °C	250	In Lab	
Inflammatory bowel disease (sequence analysis of NOD2 gene) (CGC genetics)	M651	67 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	53,650	Out Lab	
Infliximab Antibodies, INXAB (Mayo)	N783	13 Days	Electrochemiluminescent Bridging Immunoassay	Absence of antibodies to infliximab (ATI) is defined as <50 U/mL Presence of ATI is reported as positive when concentrations are > or =50 U/mL	serum 1 ml	Frozen (preferred) 28 days	19,800	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Infliximab Quantitation [NFXR] (Mayo)	N782	13 Days	Selective Reaction Monitoring LC-MS/MS	Limit of quantitation is 1.0 mcg/mL. Therapeutic ranges are disease specific. Pediatric reference ranges are not established.	serum 1 ml	Frozen (preferred) 28 days	22,730	Out Lab	
Influenza A (H1N1) 2009 PCR (Chula)	H131	5 days	PCR		Nasopharyngeal aspirate/wash in sterile container	2-8 °C	3,000	Out Lab	
Influenza A Antibody IgM(DMSC)	P115	12 days	ELISA		serum 1 ml	2-8 °C	870	Out Lab	
influenza A H5N1 PCR (Avian Flu) [Rama]	H153	2 days	Real time PCR	Non reactive (sensitivity 100 copies)	Nasopharyngeal wash/aspirate, Nasopharyngeal swab in VTM or Throat swab in VTM	2-8 °C	1,900	Out Lab	
Influenza A, B & RSV PCR (STAT) [BML]	M080	1 hour	An automated multiplex real-time RT-PCR		Nasopharyngeal swab in 3 ml UTM	Room Temperature (2-8oC up to 72 hrs)	2,440	In Lab	
Influenza A, B and RSV (PCR)(BML)	M058	3 days	multiplex Real-time one-step RT-PCR assay		Nasopharyngeal aspirate/Nasal wash/Sputum 1 mL Nasal swab/Nasopharyngeal swab/Throat swab (Swab must be sterile Dacron, nylon, or rayon with plastic shafts)	2-8°C	1,500	In Lab	/
Influenza A/B and RSV combo (Fluorescence Immunoassay)	P951	1 day	Fluorescence immunoassay	Negative	Nasopharyngeal swab/aspiration	2-8 °C	1,200	In Lab	
Influenza A/B screening (Fluorescence immunoassay)	N298	1 day	Fluorescence immunoassay technology used with Sofia analyzer		Nasal swab or Nasopharyngeal swab/aspiration	2-8 °C	750	In Lab	
Influenza A/B screening (Immunochromatography)	N295	1 day	immunochromatography	Negative	Nasopharyngeal aspirate/swab, Nasal swab in special kit	2-8oC	500	In Lab	/
Influenza Antibody (Hi titer)(DMSC)	P110	12 days	HI		serum 1 ml	2-8 °C	1,330	Out Lab	
Influenza B Antibody IgM(DMSC)	P105	12 days	ELISA		serum 1 ml	2-8 °C	870	Out Lab	
Influenza B RNA detection (Siriraj)	H186	11 days	realtime PCR		Nasopharyngeal wash or aspirate 1 ml (in sterile container)or Nasal swab in VTM	2-8 °C	2,320	Out Lab	
Influenza Virus Isolation(DMSC)	P723	30 Days	cell culture		Nasopharyngeal Aspirate (or swab) , throat swab , sputum (all of these preserved in Flu VTM)	2-8 °C	1,800	Out Lab	
Inhibin B(Questdiagnostics)	N821	30 Days	ELISA	eference Range(s) Male Female 5-9.9 Years 21-166 pg/mL ≤18 pg/mL 10-13.9 Years 41-328 pg/mL ≤86 pg/mL 14-17.9 Years 54-295 pg/mL ≤123 pg/mL ≥18 Years 47-308 pg/mL Females Pre-menopausal <153 pg/mL Post-menopausal <10 pg/mL	serum 2 ml Minimum Volume 0.5 mL	Freeze	24,380	Out Lab	
Inorganic Arsenic and Methylated Metabolites in Urine (LC-ICP-MS)	S231	within 12 days (except check up group maybe longer)	LC-ICP-MS	Inorganic Arsenic plus Methylated metabolites in urine <35 .00 ug As/L (ACGIH 2018)	Random Urine 5-10 mL. (End of workweek)	Store at 2-8 °C	2,400	In Lab	/
Inorganic phosphate	C330	1 day	Molybdate UV		serum 1 ml	2-8 °C	100	In Lab	/
Inorganic phosphate (24 hrs urine)	C412	1 day	Phosphomolybdate		24 hrs Urine (acidified to pH 3 with concentrated HCl)	2-8 °C	100	In Lab	/
Inorganic phosphate (Random urine)	C430	1 day	Molybdate UV		Random urine 5 ml	2-8 °C	100	In Lab	
Insect identification (Tropmed)	D540	5 days	microscopic examination	N/A	Insects in sterile bottle within 6 hours	room temp	320	Out Lab	
Insulin	N710	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml (fasting)	2-8 °C	600	In Lab	/
Insulin (Chula)	N708	5 days	chemiluminescence	Normal fasting 6-27 uIU/mL	fasting serum 1 ml	2-8 °C	1,250	Out Lab	
Insulin Antibodies (Mayo)	N332	16 Days	Radioimmunoassay (RIA)	< or =0.02 nmol/L Reference values apply to all ages.	Serum 2 ml	Frozen : Stability 28 Days	14,500	Out Lab	
Insulin-Like Growth Factor I Deficiency (deletion/duplication analysis of IGF1 gene)(CGC genetics)	M698	37 Days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25°C)	25,000	Out Lab	
Integrated prenatal screening, sample1 [Rama]	T523	ready report 2 nd sample	TRACE, ELISA		Serum 2 ml.	2-8 °C	700	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Integrated prenatal screening, sample2 [Rama]	T524	16 days after received 2nd serum	TRACE, ELISA		Serum 2 ml.	2-8 °C	2,100	Out Lab	
Integrated test for Down's syndrome screening	N164	10 days after received 2nd serum	TRACE Technology (Time - Resolved Amplified Cryptate Emission)	Screening negative	serum 2 ml (2 times)	2-8oC	3,400	In Lab	
Interleukin-6 (IL-6)	N976	1 day	Electrochemiluminescence immunoassay (ECLIA)	0-7 pg/ml	serum 1 ml	Frozen	1,170	In Lab	
Intestinal Permeability [ADL]	N794	23 days			urine 6 hours (no preservative) 10 ml	2-8 °C	8,820	Out Lab	
Intestinal Permeability Assessment (Urine)(Thai cell Fix)	C737	21 days			Special kit [15cc urine (before drink), 15cc aliquot of 6 hour urine (after drink)]	X	15,670	Out Lab	
INVITAE BOOSTED EXOME, PROBAND-ONLY (Invitae; USA)	MM587	2 months	NGS		EDTA Blood 6-10 ml X 2 + Request form + Clinical history + Consent Using only Invitae's Collection Kit **ทาง Site สามารถส่งเฉพาะใบ EDTA Blood 6-10 ml X 2 + Request form + Clinical history + Consent มาให้ที่ BML pack ให้ได้** For network site, requisition form and EDTA blood must be sent to BML lab for preparing of shipment.	Room temperature (for 48 hr.) 2-8 °C (for one week)	75,735	Out Lab	
INVITAE BOOSTED EXOME, TRIO (Invitae; USA)	MM588	2 months			EDTA Blood 6-10 ml X 2 per person (ฟลว2 มั้ก2 ลูกx2) + Request form + Clinical history + Consent Using only Invitae's Collection Kit **ทาง Site สามารถส่งเฉพาะใบ EDTA Blood 6-10 ml X 2 per person (ฟลว2 มั้ก2 ลูกx2) + Request form + Clinical history + Consent มาให้ที่ BML pack ให้ได้** For network site, requisition form and EDTA blood must be sent to BML lab for preparing of shipment.	Room temperature (for 48 hr.) 2-8 °C (for one week)	143,235	Out Lab	
Invitae Proactive Cardio panel (75 genes) (Invitae; USA)	MM544	30 Days	NGS		EDTA Blood 6-10 ml + Request form + Clinical history (using only Invitae's kit)	Room temperature (for 48 hr.) 2-8 °C (for one week)	23,345	Out Lab	
Iodine (Urine) (Rama)	C467	16 days	ICP/MS : Quantitative Analysis	(>15 years : 26-705 ug/L)	Random urine 5 mL (Protect from light)	2-8 °C stability 30 days	725	Out Lab	
Iodine (Urine) (siriraj)	C805	11 days	non-isotopic , Redox reaction	90.0-230.0	Random urine 5 mL (Protect from light)	2-8 °C stability 3 days	560	Out Lab	
IONA® NIPT(N Health)(Premaitha, UK)	MM625	13 Days			Maternal whole blood 10 ml in streck tube (Special kit)	6-37 oC	16,000	Out Lab	
Iron level (Quantitative)(Research thalassemia Salaya)	A865	11 days			Liver or tissue biopsy (2 cm length) in sterile container , no perservative	2-8 °C	3,450	Out Lab	
Islet Cell Antibody [BRIA]	N845	35 days	Enzyme Immunoassay	Negative < 20 U/ml ,Positive >= 20 U/ml	Serum 2 ml	2-8 °C	7,000	Out Lab	
Isopropanol (RAMA)	V775	14 Days	GC-Headspace		random urine 50 ml	2-8 °C	600	Out Lab	
Isopropanol Metabolite (Acetone) in Urine (HS-GC-MS)	S036	within 5 days(except checkup group)	GC-MS	0.0 - 40.0 mg/L (ACGIH2020)	Random urine 5-10 mL(end of shift at end of workweek)	Store at 2-8 °C	400	In Lab	
Isopropyl alcohol (blood)(BOMC)	V797	11 days	GC-FID		NaF whole blood 3 ml	2-8 °C	420	Out Lab	
Itraconazole (Rama)	V512	9 days	LC/MS/MS (Liquid Chromatograph Mass Spectrometer)		Serum 2 ml (DO NOT USE GEL TUBES)	2-8 °C	2,125	Out Lab	
JAK 2 V617F gene mutation	M352	3 days	Real-time PCR (Taqman probe) for JAK2V617F mutation	Negative for mutation	EDTA whole blood/bone marrow 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	2,400	In Lab	/
JAK2 exon 12 mutations (Sequencing) [BML]	M354	12 days	PCR and direct sequencing for JAK2 Exon 12 mutation		EDTA whole blood or bone marrow 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	12,000	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
JAK2 V617F and exon 12 mutations (Combo) [BML]	M362	12 days	Real-time PCR (Taqman Probe)		EDTA Whole Blood 3-5 mL Or EDTA Bone Marrow 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	13,500	In Lab	
Japanese Encephalitis IgG (IFA)[BPL]	P743	3 days	IFA	Negative (<1:4)	CSF 1 - 2ml, Serum 1-2 ml. (minimum 200 ul.)	2-8 °C	1,250	Out Lab	
Japanese Encephalitis IgG(RAMA)	P749	11 days	ELISA		serum 1 ml	2-8 °C	900	Out Lab	
Japanese Encephalitis IgM (IFA)[BPL]	P792	3 days	IFA		Serum , CSF 1-2 ml.	2-8 °C	1,250	Out Lab	
Japanese Encephalitis IgM(DMSC)	P750	23 days	ELISA		serum 1 ml or CSF 1 ml + clinical history	2-8 °C	650	Out Lab	
Japanese Encephalitis virus (JEV)[Chula]	H207	11 days	Qualitative Real-time PCR		CSF 2 ml , EDTA plasma 3 ml	2-8 °C	3,375	Out Lab	
Japanese Encephalitis Virus PCR [BML]	M460	3 days	Real-time RT-PCR (Taqman probe) for NS2A gene of JE virus		CSF 0.5 mL / EDTA Plasma or Serum 1 mL	2-8°C (Separate plasma within 6 hours of collection)	3,200	In Lab	
JC and BK Virus PCR (Qualitative) [BML]	M173	3 days	Real-time PCR (Taqman probe) amplify Large T-antigen of JC and VP1 gene of BK polyomavirus		EDTA plasma or serum 1 ml Urine 10 ml CSF 0.5 ml	2-8°C	2,700	In Lab	
JC virus PCR (Qualitative) [BML]	M171	3 days	Real-time PCR (Taqman probe) for Large T-antigen of JC polyomavirus	20 to 80% of healthy adults continuously excrete JCV in their urine.	EDTA plasma or serum 1 mL Urine 10 mL CSF 0.5 ml (Last updated 18-05-2019)	2-8°C 3 day	2,200	In Lab	
JC Virus PCR [Rama]	H101	5 days	Real time PCR		EDTA plasma 2 ml or CSF/Fluid 1 ml or urine 5 ml , perform immediately Brain abscess in sterile container	Plasma/ Fluid ; Freeze urine ; transport at 2-8 °C, do not freeze Abscess: 2-8 °C	2,130	Out Lab	
JC Virus Real Time PCR(tissue in parafin block) [Chula]	H041	9 days	Real time PCR		tissue in parafin block	room temp	1,730	Out Lab	
JC Virus Viral Load [Rama]	H040	5 days	real time PCR		EDTA plasma 2 ml or CSF/Fluid 1 ml or urine 5 ml , perform immediately Brain abscess in sterile container	Plasma/ Fluid ; Freeze urine ; transport at 2-8 °C, do not freeze Abscess: 2-8 °C	2,400	Out Lab	
JEV RNA detection204516 (siriraj)	H090	11 days	PCR		CSF(Sterile) 2 ml. (minimum 0.5 ml)	2-8 °C	2,430	Out Lab	
Kennedy disease Expansion Analysis (Siriraj)	B330	30 days	polymerase chain reaction (PCR) ตามด้วย direct DNA sequencing		EDTA whole blood 10 ml + request form	2-8 °C	3,700	Out Lab	
Ketone (Beta- hydroxy butyrate)(Blood)	C681	2 day	Enzymatic endpoint determination	0.21 – 2.81 mg/dL 0.02 – 0.27 mmol/L	Serum 1 ml	2 - 8 C	290	In Lab	
KLF1(Kruppel-Like Factor 1) gene sequencing (ATgenes)	MM618	16 days	Direct sequencing		EDTA whole blood 3 ml	2-8 °C	21,000	Out Lab	
KOH Prepration	D090	1 day	Microscopic examination (40% KOH SOLUTION)		The scraping sample in sterile container	Room temperature	65	In Lab	
KRAS (codon 12, 13 and 61) and BRAF Mutations (Chula GenePro)	M770	18 days	PCR		Tissue in paraffin block + H&E slide + Pathology report	room temp	20,760	Out Lab	
KRAS and NRAS (ALL RAS Exon 2, 3 and 4) (Fast-track) [BML]	M497	5 days	Automatic deparaffinized tissue (Xylene freed), extraction and multiplex Real-time PCR using Idylla KRAS and NRAS mutation tests (Biocartis)		Formalin-Fixed, Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	25,580	In Lab	
KRAS and NRAS (All RAS Exon 2, 3 and 4) [BML]	M498	10 days	Real-time PCR (ARMS) for KRAS and NRAS exon 2, 3 and 4	For anti-EGFR user, all RAS must be negative. The positive of any mutations cause resistance to anti-EGFR such as cetuximab.	Formalin-Fixed,Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	14,500	In Lab	/
KRAS and NRAS Mutations test (Codon 12,13, 61) (BML)	M451	10 days	Real-time PCR (ARMS) for KRAS/NRAS exon 2 and 3		Formalin-Fixed, Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	14,000	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
KRAS mutation (Fast-track) [BML]	M494	5 days	Automatic deparaffinized tissue (Xylene freed), extraction and multiplex Real-time PCR using Idylla KRAS mutation test (Biocartis)		Formalin-Fixed, Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	13,330	In Lab	
K-RAS PCR (Codon 12, 13, 61)[BML]	M450	10 days	Real-time PCR (ARMS) for KRAS exon 2 and 3		Formalin-Fixed, Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	10,000	In Lab	/
KRAS, NRAS and BRAF (All RAS Exon 2, 3 and 4; BRAF V600E) [BML]	M499	10 days	Real-time PCR (ARMS) for KRAS and NRAS exon 2, 3 and 4 Real-time PCR for BRAF V600E mutation	For anti-EGFR user, all RAS and RAF must be negative. The positive of any mutations cause resistance to anti-EGFR such as cetuximab.	Formalin-Fixed,Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	15,000	In Lab	/
Kryptopyrroles Test, Urine (Thai cell Fix)	C572	3 days	Chemistry		5-10 ml of first morning urine in special KIT	Preservative or Freeze	750	Out Lab	
Lactate (CSF)	N851	1 day	Lactic Acid to Pyruvate		CSF 1 ml	3 hours at 15-25 °C 24 hours at 2-8 °C	350	In Lab	/
Lactate (CSF) (Siriraj)	N848	3 Days	Enzymatic method	Reference value in CSF : 1.1 - 2.4 mmol/L (adult) 1.1 -6.7 mmol/L (neonate) 1.1 -4.4 mmol/L (3-10 days old) 1.1 -2.8 mmol/L (>10 days old)	CSF 1-2 ml	24 hours at 2-8 °C	565	Out Lab	
Lactate (Plasma)	N850	1 day	Lactic Acid to Pyruvate	mmol/L	NaF plasma 1 ml	2-8 °C	350	In Lab	/
Lactose intolerance (targeted mutations analysis of MCM6 gene)(CGC genetics)	M627	45 Days	aSNP		EDTA whole blood 3 ml	Room temp. (20-25 °C)	34,785	Out Lab	
LAMA2-Related Muscular Dystrophy (sequence analysis of LAMA2 gene) (CGC genetics)	M792	67 Days	DNA Sequencing		Peripheral Blood (EDTA tube) 3 ml	Room temp. (20-25 °C)	78,000	Out Lab	
Lamivudine (3TC) (RAMA)	V694	11 days	HPLC	N/A	EDTA whole blood 6 mL or EDTA plasma 2 mL [Centifuge 1500 rpm 15 minute] ,(Shold be sent to subcontract within 6 hrs after blood collecting.)	EDTA Whole blood 2-8 °C 6 Hr, Plasma -20 °C 48 Hr.	1,330	Out Lab	
Lamotrigine (Rama)	C468	11 days	LCMS		Serum 2 ml	2-8 °C	2,875	Out Lab	
Lamotrigine Quantitative (Quest Diagnostics)	V646	32 days	Liquid Chromatography, Tandem Mass Spectrometry	4.0-18.0 mcg/mL	serum 2 ml (Draw 1/2-1 hour before next dose at steady state)	Freeze ; stability 14 Days	16,700	Out Lab	
Latex Agglu for Meningitis Bacteria in CSF	P709	2 days	Latex agglutination	Negative	CSF 1 ml	2-8 °C few hours/ - 20 °C longer CSF แนะนำ 2-8 องศา// คู่มือวิธี 16.03.2016	1,500	In Lab	
LDH (Fluid)	C765	1 day	UV assay		Body fluid 5 ml	2-8 °C	200	In Lab	
LDH -Isoenzyme	C093	11 days	Electrophoresis		serum 2 ml	2-8 °C	1,100	Out Lab	
LDH(Lactate Dehydrogenase)	C130	1 day	UV assay		serum 1 ml (no hemolysis)	2-8 °C	200	In Lab	/
LDL- Cholesterol (Direct)	C640	1 day	Homogeneous enzymatic colorimetric assay		serum 1 ml	2-8 °C	150	In Lab	/
LDL Receptor gene [Rama]	MM766	2 months	-		EDTA Whole blood 5 ml	2-8 °C, Stability 1 month	18,550	Out Lab	
LDL Subclasses (Low density lipoprotein subclasses)(Rama)	C072	23 days	polyacrylamide gel electrophoresis		fasting serum 2 ml (minimum 1 ml)	2-8 °C	5,180	Out Lab	
LE Cells	P200	1 day	Latex agglutination		serum 1 ml	2-8 °C	200	In Lab	
LE cells (body fluid) (Siriraj)	P698	5 days	Latex agglutination test		body fluid or CSF 1 ml	2-8 °C	410	Out Lab	
Lead (blood) [Reference Toxicology, more than 5 samples]	V402	23 days	AAS		EDTA whole blood 2 ml (minimum 1 ml)	2-8 °C	500	Out Lab	
Lead in Blood (ICP-MS)	S240	within 7 days (except check up group maybe longer)	ICP-MS	0.00-200.00 ug/L, 0.00-20.00 ug/dL (ACGIH 2020)	EDTA Whole Blood 1 mL**	Store at 2-8 °C	400	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Lead in Blood (ICP-MS) (STAT)	S241	within 5 days (except check up group maybe longer)	ICP-MS	0.00-200.00 ug/L, 0.00-20.00 ug/dL (ACGIH 2020)	EDTA Whole Blood 1 mL**	Store at 2-8 °C	650	In Lab	/
Lead in Blood (RAMA)	V643	5 days (except check up, TAT longer)	GFAAS		EDTA whole blood 5 ml (in vacutainer tube)	2-8 °C	520	Out Lab	
Lead in Urine (ICP-MS)	S245	within 7 days (except check up group maybe longer)	ICP-MS	Less than 25.00 ug/g creatinine ("Industrial Chemical Exposure: Guidelines for Biological Monitoring", 3rd edition (2001), p. 603.)	Random Urine 5-10 mL .	Store at 2-8 °C	380	In Lab	/
Legionella antigen screening	P297	1 day	immunochromatography	Negative	Random urine 5 ml	2-8oC (Stability 1 week)	900	In Lab	/
Legionella Culture (DMSC)	E075	23 days	culture		Water 500 ml ,refrigerated ,within 3 days	2-8 °C	1,730	Out Lab	
Legionella Culture [Genus and species] [DMSC]	E495	23 days	Culture		Water 500 ml ,refrigerated ,within 3 days	2-8 °C	3,000	Out Lab	
Legionella pneumophila IgG, Serotype1-14 Ab (BPL)	N776	3 Days	Immunofluorescence	Negative	Serum 1 ml	2-8 °C	1,400	Out Lab	
Legionella pneumophila IgM, Serotype1-14 Ab (BPL)	N777	3 Days	Immunofluorescence	Negative	Serum 1 ml	2-8 °C	1,400	Out Lab	
Leigh syndrome DNA analysis (Rama)	B424	20 Days	PCR		EDTA whole blood 3-5 ml	2-8 oC (stability 7 days)	3,500	Out Lab	
Leishmania Antibody	P101	5 days	Direct Agglutination		Serum 2 ml	2-8 °C	640	Out Lab	
Leishmania Donovanii Staining (Tropmed)	A130	7 days	Giemsa stain		EDTA whole blood 3 ml + 1 blood smear	2-8 °C stability 3 days	460	Out Lab	
Leishmania PCR	E413	9 days			EDTA whole blood 4 ml (จำนวน 2หลอด)	2-8 °C	1,100	Out Lab	
Leptin (Biovis 627)	C689	16 days	EIA	-	serum x 2 Tube และ 3 ml	frozen	6,900	Out Lab	
Leptospira Ab IgG	P275	1 day	Immunochromatography : SD BIOLINE		serum 1 ml	2-8oC	393	In Lab	
Leptospira Ab IgM	P276	1 day	Immunochromatography : SD BIOLINE		serum 1 ml	2-8oC	632	In Lab	
Leptospira Ab(Serotype) [DMSC]	P277	11 days	MAT (Microscopic Agglutination Test)		serum 2 ml	2-8 °C	1,500	Out Lab	
Leptospira Culture (Chula)	E485	35 Days	culture	N/A	Fresh dropping-blood in 3 tubes of specific media (Fletcher's media) 1 drop, 2 drops and 3 drops in 1st, 2nd and 3rd tubes by step , gently mix , transport at room temp	room temp	520	Out Lab	
Leptospira IgG and IgM titer (BPL)	P900	3 days	IFA	Negative (<1:50)	serum 1 ml	2-8 °C	900	Out Lab	
Leptospira PCR	M466	3 days	Real-time PCR detect Leptospira LipL32 gene		EDTA Plasma or Serum or CSF 1 mL (Sample are collected within 7 days of illness) or Urine 5-10 mL are collected within 2nd to 4th week of illness	2-8°C (Separate plasma within 6 hours of collection)	1,790	In Lab	
Leptospira PCR Combo in Blood and Urine (BML)	M467	3 days	Real-time PCR (Taqman Probe) for Leptospira LipL32 gene		EDTA Plasma or Serum 1 mL (Sample are collected within 7 days of illness) and Urine 5-10 mL are collected within 2nd to 4th week of illness	2-8°C (Separate plasma within 6 hours of collection)	2,690	In Lab	
Leukemia chromosome analysis [Rama]	B576	23 days	G-banding chromosome analysis		Sodium or Lithium Heparin (Green) whole blood /Bone marrow 3-5 ml.	Room Temp	5,000	Out Lab	
Levetiracetam (Keppra) in Blood (LC-MS/MS)	S400	Within 5 days	Liquid chromatography tandem mass spectrometry (LC-MS/MS)	12.00 – 46.00 mg/L	Serum 1 mL	Store & transport at 2-8 °C	1,980	In Lab	
Lipase	C025	1 day	Quinone Dye	0 -190 U/L	serum 1 ml	2-8oC	200	In Lab	/
Lipase(Fluid)	C026	1 day	Quinone Dye		Ascitic fluid or CSF 3 ml	2-8oC	200	In Lab	
Lipid set (Chol , Tri , HDL , LDL)	C018	1 day	Cholesterol : Enzymatic, colorimetric method Triglyceride : Enzymatic colorimetric test. HDL : Homogeneous enzymatic colorimetric test LDL : Homogeneous enzymatic colorimetric assay.	Cholesterol : <200 mg/dL Triglyceride : <150 mg/dL HDL : >50 mg/dL LDL : <130 mg/dL	serum 1 ml	2-8 oc	450	In Lab	/
Lipoprotein (a)	C685	1 days	nephelometry (Atellica)	Male 2 - 53 mg/dL Female 2 - 46 mg/dL	serum 1 ml	2-8 °C	500	In Lab	
Lipoprotein Electrophoresis (RAMA)	T770	14 Days	Electrophoresis		8-12 hour-fasting serum 1 ml	2-8 °C	870	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Liquid biopsy actionable cancer panel(1-2 Samples)(Rama)	MM763	21 days	Next Generation Sequencing		10 ml Blood in special tube (PAXgene tube)	Room temp only (20-25 oC)	113,000	Out Lab	
Liquid biopsy actionable cancer panel(3-4 Samples)(Rama)	MM769	21 days	Next Generation Sequencing		10 ml Blood in special tube (PAXgene tube)	Room temp only (20-25 oC)	72,960	Out Lab	
Liquid biopsy actionable cancer panel(5-6 Samples)(Rama)	MM770	21 days	Next Generation Sequencing		10 ml Blood in special tube (PAXgene tube)	Room temp only (20-25 oC)	36,510	Out Lab	
Liquid genomics plasma LG complete profile (NRB Group)	MM098	21 Days			Blood in special collection kit (Liquid Genomics) 1. Draw one tube of patient blood into the Cell-Free DNA BCT® tube. 2. Draw one tube of patient blood into the Cell-Free RNA BCT® tube. 3. Use only the tubes provided in the Liquid Genomics collection kit. 4. Draw sufficient blood to fill the tubes provided in the collection kit. 5. Gently invert the tubes 8-10 times to mix the DNA and RNA stabilizer.	Store at ambient temperature (18-25° C). Do NOT refrigerate or freeze. Specimen should be shipped within 24 hours of blood draw (not to exceed 5 days after blood draw)	210,000	Out Lab	
Lithium (BRIA)	C670	3 days	ISE		serum 1 ml	2-8oC	600	Out Lab	
Lithium in Blood (ICP-MS)	S265	within 7 days (except check up group maybe longer)	ICP-MS	For normal person :1.80 - 18.80 ug/L Note: Forensic Science International 153(2005)39-44 For therapeutic treatment :0.50-1.20 mmol/L Note: Clinical Laboratory Medicine for Mental Health Professional;P97	EDTA plasma 1 mL.**	Store at 2-8 °C	550	In Lab	
Liver Detoxification Profile (Biostem)	C788	23 days	N/A		saliva and urine each specimen collected in special kit	2-8 °C	8,130	Out Lab	
Liver Function Test (8 Tests)	C071	1 day			serum 1 ml	2-8 oc	400	In Lab	/
Liver/Kidney Microsome Antibody (LKM Ab)	N965	5 days	IFA		serum 1 ml	2-8 °C	1,590	In Lab	
LiverFACT (FibroTest/Actitest)	C797	1 day	Immunoturbidity+Diazonium salt+ L-Gamma-glutamyl-3-carboxy-4-nitroanilide Substrate (Non-IFCC)+Enzymetric+Glycerol Phosphate Oxidase BY Alinity +Nephelometry by Cobas + Atellica Analyser		Serum or heparin plasma 1 ml	2-8 °C	7,000	In Lab	
LiverFAST (FibroMax)	C799	1 days	Immunoturbidity+Diazonium salt+ L-Gamma-glutamyl-3-carboxy-4-nitroanilide Substrate (Non-IFCC)+Enzymetric+Glycerol Phosphate Oxidase BY Alinity +Nephelometry by Cobas + Atellica Analyser		serum or heparin plasma 1 ml. (If can not separate serum from clote tube immediately must have NaF blood 1 ml for analyse Glucose)	2-8 °C	8,000	In Lab	
LiverFAST(FibroMax)(Add on from SteatoTest-Positive)	C899	1 days	Nephelometry, Immunoturbidimetric assay,enzymatic method	-	-	-	4,200	In Lab	
LOH 10q(Chula GenePro)	M982	16 days	Microsatellite Analysis		EDTA whole blood 3 ml (2 tubes) and Tissue in paraffin block + H&E slide + Pathology report	Room temp (20-25°C) Stability 3-5 days	6,500	Out Lab	
LOH 1p/19q (Chula GenePro)	M974	16 days	Microsatellite Analysis detect loss of heterozygosity		EDTA whole blood 3 ml (2 tubes) and Tissue in paraffin block + H&E slide + Pathology report	Room temp (20-25 °C) Stability 3-5 days	13,130	Out Lab	
Long QT Syndrome 1 (sequence analysis of KCNQ1 gene)(CGC genetics)	M696	67 days	NGS		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	55,000	Out Lab	
Long QT Syndrome 2 (sequence analysis of KCNH2 gene)(CGC genetics)	M697	67 days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	55,000	Out Lab	
Lopinavir and Ritonavir (Chula)	C950	30 Days	HPLC		Heparinized plasma 2 ml , frozen (collect blood after drug uptake 12 hours)	Frozen	1,730	Out Lab	
Lucence LiquidHALLMARK (BMG)	MM581	23 days	NGS		Blood in 3 Streck tubes (7.5 ml each, total 22.5 ml)	Room temperature	84,000	Out Lab	
Lucence LiquidMARK (Breast, Colon or Lung) (BMG)	MM598	21 days	NGS		Blood in 3 Streck tubes (7.5 ml each, total 22.5 ml)	Room temperature	56,000	Out Lab	
Lupus-Like Anticoagulant	K080	5 days	APTT uRz DRVVT screen/confirm	Lupus anticoagulant negative	Na Citrate plasma 1 ml	Freeze	485	In Lab	
Luteinizing Hormone (LH) (BGH)	N241	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	300	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Lycopene (HPLC)	S501	within 5 days	HPLC	54 - 671 ug/L	Serum 2 mL .	Light protected at 2-8 °C	1,000	In Lab	
Lyme Disease IgM&IgG (Western Blot)(Mayo)	N338	12 days	Immunoblot	IgG: Negative IgM: Negative Reference values apply to all ages	Serum 2 ml	Frozen : Stability 30 Days	12,400	Out Lab	
Lysozyme (Muramidase),Plasma(Mayo)	C466	14 days	Turbidimetric	> or =12 months: 2.7-9.4 mcg/mL Reference values have not been established for patients who are <12 months of age	EDTA plasma 3 mL	Frozen (Stability 30 days)	12,820	Out Lab	
Magnesium	C340	1 day	Enzymatic		serum 1 ml	2-8 °C	200	In Lab	/
Magnesium (Random Urine)	C420	1 day	Enzymatic		Random urine 20 ml	2-8 °C	200	In Lab	/
Malabsorption alpha-1-antitrypsin,calprotectin (Biovis 011)	C693	16 days	N/A	-	stool 5 grams in sterile container	room temp or 2-8 oc, stability 5-7 days	7,200	Out Lab	
Malaria (PCR) [TropMed]	A156	9 days	RT PCR	-	EDTA whole blood 3 ml	2-8 °C	2,800	Out Lab	
Malaria antigen screening	A155	1 day	immunochromatography		EDTA Blood 2 ml	2-8oC	400	In Lab	
Malaria multiplex PCR	M511	3 days	Real-time PCR (Taqman probe) for four species of malaria		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,700	In Lab	
Malarial Parasites	A150	1 day	Wright's-Giemsa Stain		EDTA Blood 2 ml	2-8oC	80	In Lab	/
Maldigestion Pancreas-elastase, bile acid (Biovis 009)	C694	16 days	N/A	-	stool 5 grams in sterile container	room temp or 2-8 oc, stability 5-7 days	7,800	Out Lab	
Maldigestion Pepsinogen1 (Biovis 010)	C690	16 days	ELISA	-	serum 2 ml.	frozen	6,000	Out Lab	
Male Comprehensive Package (urine)(Biostem)	C851	23 days	N/A		random urine or 24 hour-urine (24 hour-urine is preferred)	2-8 °C	16,800	Out Lab	
Male Hormone Profile(Saliva) [biostem]	N793	23 days			saliva 5 ml in collecting kit (1 tube)	2-8 °C, do not freeze	7,000	Out Lab	
Malondialdehyde (MDA) (HPLC)	S008	within 7 days	HPLC	26-89 µg/L	EDTA plasma 1 ml	Light protected at 2-8 °C	1,900	In Lab	
MammaPrint (Agendia)	MM987	21 days	Microarray		FFPE cancer tissue block OR 12 unstain slides (containing >30% tumor content) using Agendia Kit	Room Temp	182,000	Out Lab	
Mandelic Acid (RAMA)	V642	7 days (TAT longer for check up)	HPLC-DAD	<=800 mg/g creatinine	urine 50 ml (end of shift)	2-8 °C	550	Out Lab	
Mandelic acid plus Phenylglyoxylic acid (RAMA)	V822	2 weeks (check up : TAT 3 weeks)	HPLC-Diode array		urine 30 ml	2-8 °C	520	Out Lab	
Manganese in Blood (ICP-MS)	S048	within 7 days (except check up group maybe longer)	ICP-MS	Normal person: < 10.00 ug/L Exposed person: < 100.00 ug/L	EDTA Whole Blood 1 mL	Store at 2-8 °C	430	In Lab	/
Manganese in blood (RAMA)	V115	5 days	Graphite Furnance Atomic Absortion Spectrophotometry ; GFAAS	<2.5 ug/L	Serum 1 ml (DO NOT USE GEL TUBES)	2-8 °C	520	Out Lab	
Manganese in Urine (ICP-MS)	S049	within 7 days (except check up group maybe longer)	ICP-MS	Less than 3.00 ug/g creatinine R. R. Lauwerys and P. Hoet "Industrial Chemical Exposure: Guidelines for Biological Monitoring" (2001) 3rd ed., p. 603.	Random urine 5-10 mL	Store at 2-8 °C	380	In Lab	/
MAPT mutations for frontotemporal dementia [BML]	M359	21 days	PCR and direct sequencing		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	22,000	In Lab	
Marfan Syndrome [Fibrillin-1 Gene (FBN1)](Siriraj)	B579	6 months	PCR and direct DNA sequencing		EDTA whole blood 10 ml	2-8 °C	12,500	Out Lab	
Marijuana (Cannabinoids)	V700	1 day	kinetic interaction of microparticles in a solution (KIMS)		Random urine 5 ml	2-8 °C	300	In Lab	/
Maternal serum AFP screening	N966	5 days	Time Resolved Amplified Cryptate Emission (TRACE)		Serum 2 ml	2-8 °C	400	In Lab	
Measle Virus Antigen (Siriraj)	P355	5 days	IFA		Nasopharyngeal aspirate/wash, BAL in VTM 1 ml. (Send to Subcontractor within 24 hr.)	2-8 °C	1,300	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Measles antibody for subacute sclerosing panencephalitis; SSPE (NIH)	P357	21 Days	micro neutralization		CSF 500 uL and paired serum 1 ml	Freeze -20 °C	1,500	Out Lab	
Measles Virus (IgM Titer)(BPL)	P805	3 days	immunofluorescence		serum 1 ml	2-8 °C	1,250	Out Lab	
Measles Virus IgG	P751	3 days	ELISA	Negative	serum 1 ml	2-8 °C	400	In Lab	/
Measles Virus IgG Titer (CSF) [BPL]	P144	3 days	immunofluorescence		CSF 1 ml (minimum 300 ul.)	2-8 °C	1,250	Out Lab	
Measles Virus IgM	P752	4 days	ELISA	Negative	serum 1 ml	2-8 °C	690	In Lab	/
Measles Virus IgM Titer (CSF) [BPL]	P145	3 days	immunofluorescence		CSF 1 ml (minimum 300 ul.)	2-8 °C	1,250	Out Lab	
MECP2 for RETT syndrome (Exon 2, 3 and 4) [BML]	M002	1 month	PCR and bi-directional sequencing		EDTA BLOOD 3-5 ml	Room temperature 24 Hr 2-8oC 1 month	8,100	In Lab	
media for Adenovirus isolation (Chula)	H129	N/A			-	-	125	Out Lab	
media for Chlamydia culture(Chula)	E540	N/A	-	-	-	-	220	Out Lab	
Medication DNA Insight (ThaiStemLife)	B585	42 Days			Buccal swab (in special test kit)	-Read instructions inside package before collecting	34,000	Out Lab	
Melioid IgG Titer(BPL)	P890	4 days	IFA		serum 1 ml	2-8 °C	600	Out Lab	
Melioid IgM Titer(BPL)	P891	4 days	IFA		serum 1 ml	2-8 °C	700	Out Lab	
Melioidosis (Total Antibody)	P270	2 days	hemagglutination	titer < 1:80	serum 1 ml	2-8oC	150	In Lab	
Meningitis/Encephalitis Panel (STAT) [BML]	M062	Report within 4 hours after receive specimen	FilmArray		CSF 0.5 ml in sterile container	2-8 °C up to 7 days	7,890	In Lab	
Menopause Check Plus (Single Sample w/DHEA)(Thai cell Fix)	C730	17 Days			5ml saliva sample	x	19,090	Out Lab	
Menopause Plus (Thai cell Fix)	C726	17 Days			8 saliva samples (5ml) collected over a 6-day period (frozen)	frozen	24,000	Out Lab	
Mercury (Blood)[Reference toxico]	V419	35 Days	ICP	= < 15 ug/L	EDTA blood 3 ml.	2-8 °C	820	Out Lab	
Mercury (Urine)[Reference toxico]	V422	35 Days	ICP	= < 35 ug/g creatinine	Urine 20 ml.	2-8 °C	700	Out Lab	
Mercury in Blood (ICP-MS)	S236	within 7 days (except check up group maybe longer)	ICP-MS	0.00- 15.00 ug/L (ACGIH 2012)	EDTA Whole Blood 1 mL**	Store at 2-8 °C	430	In Lab	/
Mercury in Urine (ICP-MS)	S235	within 7 days (except check up group maybe longer)	ICP-MS	0.00-20.00 ug/g creatinine (ACGIH 2020)	Random Urine 5-10 ml. (Prior to shift) **	Store at 2-8 °C	600	In Lab	/
Mercury in Urine (ICP-MS)(STAT)	S234	within 5 days (except check up group maybe longer)	ICP-MS	0.00-20.00 ug/g creatinine (ACGIH 2020)	Random Urine 5-10 ml .**	Store at 2-8 °C	750	In Lab	
Mercury(Urine 24 Hr) (RAMA)	V117	5 days	AAS		Urine 24 hrs 50 ml.(no preservative) Pease note total volume every case	2-8 °C	550	Out Lab	
Merosin-negative congenital muscular dystrophy (deletion/duplication analysis on LAMA2 gene) (CGC genetics)	M793	37 Days	PCR		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	24,500	Out Lab	
MERS-CoV (Coronavirus 2012) RT-PCR [BML]	M482	2 days	Real-time RT-PCR (Taqman Probe) for upE and orf1a regions of MERS-CoV		Respiratory specimen 1 mL in lysis solution with leak-proof container ///ไม่รับสิ่งส่งตรวจที่ไม่ได้เก็บใน lysis solution ///	2-8 °C for up to 72 hours	3,200	In Lab	
Metabolic Analysis Profile (Urine) (Organic Acids)(Thai cell Fix)	C792	23 days			First morning urine (if urinate within 6hrs. before rising time should refrigerated before send)	frozen (ship at 0 oC and below) stability 7 days	22,600	Out Lab	
Metachromatic Leukodystrophy (Rama)	C418	21 days	N/A		EDTA whole blood 10-15 ml.	2-8 °C	1,900	Out Lab	
Metachromatic Leukodystrophy, MLD (Siriraj)	B066	60 days	polymerase chain reaction (PCR)		EDTA whole blood 5 - 10 ml.	2-8 °C	6,250	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Metals Analysis in Hemodialysis Water (Mass Spectrometry)	S199	17 days	ICP-MS	Sb: < 6.000 ug/L, As: < 5.000 ug/L, Cd: < 1.000 ug/L, Cr: < 14.000 ug/L, Cu: < 100.000 ug/L, Pb: < 5.000 ug/L, Hg: < 0.200 ug/L, Se: < 90.000 ug/L, Tl: < 2.000 ug/L, Zn: < 100.000 ug/L (AAMI Guidelines for Hemodialysis Water Quality (2006).)	RO water (use for hemodialysis) 5-10 mL in plastic tube.	Store at 2-8 °C	1,900	In Lab	
Metals Screen (urine) (BioStem)	V016	23 days	N/A		24 hr Urine (no preservative) or random urine in special kit	2-8 °C	6,880	Out Lab	
Metanephrine, Urine-HPLC (24-h Urine)	S217	within 10 days	HPLC	Male 0.00-374.7 µg/24h Female 0.00-276.1 µg/24h	24 hr urine 10-20 mL. Preservative :Hydrochloric acid Record total volume.	Store at 2-8 °C .	2,480	In Lab	/
Metanephrines(Plasma)(Mayo)	N612	11 days	Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)	Reference Values; METANEPHRINE, FREE <0.50 nmol/L NORMETANEPHRINE, FREE <0.90 nmol/L	Plasma EDTA 1 mL	Freeze 14 days	24,000	Out Lab	
Metanephrines, Plasma (LC-MS/MS) (Normetanephrine, Metanephrine and 3-Methoxytyramine)	S503	within 8 days	Liquid Chromatography tandem Mass Spectrometry (LC-MS/MS)	Metanephrine = 0 – 73.17 pg/mL (0 – 371 pmol/L) Normetanephrine = 0 – 174.59 pg/mL (0 – 953 pmol/L) 3-Methoxytyramine = 0 – 15.05 pg/mL (0 – 90 pmol/L)	Plasma (Heparinized) , 1 mL.	Store at 2-8 °C .	3,000	In Lab	/
Metanephrines, Urine-HPLC (Normetanephrine, Metanephrine and 3-Methoxytyramine) (24-h Urine)	S221	within 10 days	HPLC		24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volume.	Store at 2-8 °C .	2,480	In Lab	/
Metanephrines,Plasma(Chula)	N609	20 days	LC-MS		EDTA Plasma 3-4 ml	Freeze -20 oC (stability 3 month)	3,875	Out Lab	
Metanephrines/ Normetanephrine (Chula)	N983	30 days	HPLC		24 Hr Urine (preserved by 1.25 ml of 6N HCl) 30 ml,protect from light	2-8 °C	2,300	Out Lab	
Methadone and metabolite(RAMA)	V468	9 days	Gas Chromatography/Mass Spectrometry (GC/MS)		Urine (Random,no preservative) 20 mL. Whole blood (NaF or EDTA Blood) 3-5 mL. Serum (No Gel) or Plasma 1 mL.	2-8 °C	2,750	Out Lab	
Methanol (Fluid)(Rama)	V128	6 days	GC-Headspace		Eye fluid 1 ml	2-8 °C	500	Out Lab	
Methanol in Blood (Rama)	V548	11 days	GC-Headspace	WB= 0 mg%	NaF 3-5 ml	2-8 °C	500	Out Lab	
Methanol in gastric content (Rama)	V207	11 days	GC-Headspace	No reference range	Gastric 5 - 10 ml (end of shift)	2-8 °C	520	Out Lab	
Methanol in Urine (HS-GC-MS)	S030	within 5 days(except checkup group)	GC-MS	0.0 - 15.0 mg/L (ACGIH2020)	Random Urine 10-20 mL. (End of shift)	Store at 2-8 °C	400	In Lab	/
Methanol in Urine (Rama)	V547	11 days	GC-Headspace	0 - 15 mg/L	urine 50 ml (end of shift)	2-8 °C	520	Out Lab	
Methemoglobin(Special Lab Center)	A600	8 days	Spectrophotometry		EDTA whole blood 2 ml	2-8 °C stability 7 Days Freeze stability 10 Days	400	Out Lab	
Methotrexate(Rama)	V345	3 day	FPIA		serum 1 ml	2-8 °C	640	Out Lab	
Methotrexate; MTX (Siriraj)	V349	3 days	CMIA [Chemiluminescence Microparticle Immunoassay]	0.5-1.0 umol/L	serum 1 ml or 1ml of EDTA Plasma , Sodium Heparin Plasma and Oxalate Plasma	2-8 °C	1,460	Out Lab	
Methyl Ethyl Ketone in Urine (HS-GC-MS)	S033	within 5 days(except checkup group)	GC-MS	0.0 - 2.0 mg/L (ACGIH2020)	Random Urine 5-10 mL.(End of shift)	Store at 2-8 °C	500	In Lab	/
Methyl Isobutyl Ketone (MIBK)(BOMC)	V104	16 days	GC-FID		Urine 10 ml.	2-8 °C	390	Out Lab	
Methyl Isobutyl Ketone in Urine (HS-GC-MS)	S063	within 5 days (except checkup group)	Gas Chromatography mass spectrometry (HS-GC-MS)	0.00 - 1.00 mg/L (ACGIH2020)	Random Urine 5-10 mL (End of Shift)	Store at 2-8 °C	400	In Lab	/
Methyl Isobutyl Ketone(Special Lab Center)	V766	11 days	GC Head space		urine 20 ml end of shift	2-8 °C	450	Out Lab	
Methylmalonic acid (MMA,Blood)(Mayo)	C773	14 days	Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)	≤0.40 nmol/mL	Serum 1.5 ml.	Frozen Stability 48 days	12,200	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
MGMT Promoter Methylation (Chula)	M769	18 days	PCR		Tissue in paraffin block + H&E slide + Pathology report	Room temp	10,250	Out Lab	
MIC for Mycobacterium tuberculosis panal (Siriraj)	E635	30 Days	MIC		Mycobacterium tuberculosis colony	Room temp	3,500	Out Lab	
MIC for Rapid growing non-tuberculous mycobacteria panal (Siriraj)	E114	30 Days	MIC		Mycobacterium colony (NTM)	Room temp	2,200	Out Lab	
MIC for slow growing non-tuberculous mycobacteria panal (Siriraj)	E636	30 Days	MIC		Mycobacterium colony (NTM)	Room temp	2,800	Out Lab	
Microalbumin (urine)	N210	1 day	Immunoturbidimetric		Random urine 5 ml	2-8 °C	300	In Lab	/
Microbial identification (molecular)(Rama)	E007	9 days	PCR sequencing		Fluid 1-2 ml (minimum 100-200 ul) or pus from sterile site in sterile container ,purified colonies ,Tissue in sterile container or purified colonies,Clotted blood(Not separate), EDTA Whole blood	Room temp	2,400	Out Lab	
Microbilirubin	A520	1 day	photometer		Red Capillary tube 2 tubes	2-8 °C protected from light	200	In Lab	
Microbiome & Micronutrient Sensor (Rapport/Genosense)	B625	35 days	SNPs		Blood drop collection/urine sample collection in special kit	Room Temp.	27,860	Out Lab	
Micronutrient Profile +Vitamin D2/D3	S901	5 days	HPLC,LC-MS/MS,ICP-MS,ECLIA & Colorimetric method		No.1.Serum 2 mL .(Light Protected) No.2.Serum 1 mL .(Light Protected) No.3.EDTA Whole blood 1 mL No.4.EDTA Plasma 1 mL	Light protected at 2-8 °C	12,500	In Lab	
Microscopy Examination(Fluid)	D020	1 day	Microscopic examination/Flow cytometry Method		Body fluid 2 ml (Joint fluid : EDTA 1 tube and no anticoagulant 1 tube)	2-8oC	200	In Lab	
Microsomal Ab (Thyroid peroxidase Ab) (Anti TPO)	T160	1 day	Chemiluminescent microparticle immunoassay (CMIA)	0.0 - 5.6 IU/ml	serum 1 ml	2-8oC	350	In Lab	/
Mineral Analysis (Hair) (All Minerals - Trace, Macro and Toxics)(BioStem)	V015	23 days	N/A		Hair in special kit	room temperature	10,000	Out Lab	
Minimum Inhibitory Concentration(MIC)/1 Antibiotic(Rama)	E280	9 days	E-test		Purified colony on blood agar , inform microorganism and antibiotic name , and please contact case by case (receive sample just only Mon,Tue,Wed)	Room temp	870	Out Lab	
Mitochondrial cytopathies (CGC genetics)	M691	67 days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	39,000	Out Lab	
Mitragynine(Rama)	V130	9 days	Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)		Clotted blood 3-5 mL. or NaF 3-5 mL.	2-8 °C	4,370	Out Lab	
Mnl I SNP for Hb E testing (ATGENE)	MM596	11 days	PCR-RFLP		EDTA whole blood 3 ml	2-8 °C	1,890	Out Lab	
Modified AFB stain	E240	1 day	Stain and Microscopic Examination		body fluid or stool or sputum	2-8oC	65	In Lab	
Modified trichrome stain for Microsporidia (Siriraj)	E629	3 days	Trichrome methylene-blue stain		Stool in sterile 1-5 g.	2-8 °C	500	Out Lab	
Molybdenum in Blood (ICP-MS)	S270	within 7 days (except check up group maybe longer)	ICP-MS	0.67 - 1.68 ug/L Forensic Science International 153(2005)39-44	EDTA plasma 1 mL.**	Store at 2-8 °C	550	In Lab	
Mono Spot Test	P700	1 day	Latex agglutination		serum 1 ml	2-8 °C	250	In Lab	
Morbid obesity(sequence analysis of LEPR gene)(CGC genetics)	M688	67 days	Sequence analysis of the entire coding region		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	88,000	Out Lab	
Morphine (Heroine, Opiate)	V355	1 day	Enzyme Immunoassay		Random Urine 5 ml	2-8 °C	500	In Lab	
MPL exon 10 mutations (direct sequencing) [BML]	M454	12 days	PCR and direct sequencing for MPL Exon 10 mutation		EDTA whole blood 3-5 mL EDTA bone marrow 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	5,500	In Lab	
MRSA test (Culture)	E900	3-5 day	Automate Method :Vitek MS&Vitek 2 XL	Negative	Throat swab	2-8 oC	390	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
MSI (Microsatellite Instabilities) (Fast-Track) [BML]	M432	5 days	Idylla MSI Assay uses seven microsatellite markers (ACVR2A, BTBD7, DIDO1, MRE11, RYR3, SEC31A and SULF2).		1. FFPE with tumor + 3-5 ml EDTA blood + Pathology report (Preferred) 2. FFPE with tumor + FFPE without tumor + Pathology report (Alternated) (FFPE tissue must not older than one year, if older than one year, please use M007 (5-panel MSI))	1. FFPE keeps at room temperature for 1 years 2. EDTA blood keeps at 2-8oC for 1 month	15,225	In Lab	
MTB/NTM Real-time PCR	M074	3 days	Real-time PCR		Respiratory specimen/CSF/ body fluid 1 mL EDTA whole blood, EDTA bone marrow 3-5 mL. Fresh tissue size 1 cm. ***ไม่รับ Stool*** ห้าม Tissue แช่ Formalin หาก Tissue แช่ Formalin ต้องคือ M072 โดยมี ค่าทำ Block และค่าเตรียมตัวอย่างเพิ่มเติม	2-8°C for up to 1 week	1,900	In Lab	/
MTB/NTM Real-time PCR from FFPE tissue	M072	5 days	Real-time PCR		Formalin-fixed, paraffin-embedded tissue block (FFPE) + Pathology report โดยคือ R887 ทุกครั้ง	Room temperature	2,900	In Lab	
MTB/RIF PCR(GeneXpert) [BML]	M083	24 Hours	1. Multiplex Real-time PCR for MTB IS6110/IS1881 and rpoB 2. Melting curve analysis of rpoB targets for rifampicin resistance assessment		Sputum 1 ml Fresh tissue 1 cm ³ CSF 0.5 ml (minimum 100 ul)	Room temp for 3 days, 2-8oC for 7 days	2,450	In Lab	
MTHFR gene mutations (C677T and A1298C)	M355	8 days	Multiplex real-time PCR for 677C>T and 1298A>C mutations	Negative for MTHFR C677T gene mutation -Negative for MTHFR A1298C gene mutation	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	1,500	In Lab	/
Mucopolysaccharides (MPS) Screen, Urine (Mayo)	D604	27 days	Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) Spectrophotometry (SP)		Urine 30 ml	Frozen	16,280	Out Lab	
Multiple Endocrine Neoplasia (MEN2A,MEN2B) [Rama]	B117	30 days	DNA sequencing	-	EDTA whole blood 5-10 ml	2-8 °C	7,500	Out Lab	
Multiple Endocrine Neoplasia type 2 (RET exon 10,11,13,14,15,16)(LMGG)	MM962	30 days	Next Generation Sequencing of RET proto-oncogene (Exon 10,11,13,14,15,16)		EDTA blood 6 ml	2-8 °C	11,625	Out Lab	
Multiple Endocrine Neoplasia type 2(MEN2B) (Rama)	B064	30 Days	DNA sequencing	-	EDTA whole blood 5 ml	2-8 °C	4,030	Out Lab	
Multiplex RT-PCR for AML1-ETO,CBFB-MYH11,PML-RARA in AML(Rama)	M980	23 days			EDTA Blood 5 ml or Bone marrow 3-5 ml	Specimen must be received in the laboratory on the same day as collected(keep Room temp) If necessary,please store at 4 - 8 oC	5,500	Out Lab	
Mumps IgM Titer (BPL)	P894	3 days	IFA	Negative (<1:10)	serum 1- 2 ml	2-8 °C	1,250	Out Lab	
MUMPS Virus IgG	P753	2 days	ELFA	Negative	serum 1 ml	2-8oC 7days	500	In Lab	/
MUMPS Virus IgM (BRIA)	P754	7 days	EIA		serum 1 ml	2-8 °C	800	Out Lab	
Murine typhus (R. typhi) PCR [BML]	M128	3 days	Extract DNA from clinical specimen and amplify with R. typhi reaction mix.		EDTA Whole blood 2 mL	2-8°C	1,700	In Lab	
MuSK Autoantibody(Mayo)	N519	19 days	Radioimmunoassay		Serum 2 ml , Do not use gel tube.	Frozen : Stability 28 days	41,200	Out Lab	
Myasthenic syndrome (AChR) (Prasat Neurological Institute)	T801	30 Days	ELISA	Negative <1:10	Serum 3 ml.	2-8 °C	1,730	Out Lab	
Mycobacteria Profile 1(Siriraj)	E475	2 months	Realtime PCR or Line probe assay	N/A	all types of sample in sterile container	2-8 °C	1,380	Out Lab	
Mycobacterium (colony) Identification and Susceptibility test [Rama]	E121	1 month	Identify by MGIT and/or sequencing method. MIC method for sensitivity		mycobacterium colonies or Hemo for TB AFB stain positive ** please specify , if known case is Rapid or Slow growing NTM **	Room temp	4,450	Out Lab	
Mycobacterium (colony) Identification and Susceptibility test(Siriraj)	E476	30 Days	culture by MGIT and conventional method identific	-	mycobacterium colonies	room temp	3,500	Out Lab	
Mycobacterium Identification by base sequencing (Chula)	MM620	21 days	Sequencing		Sample in sterile container -Sputum 3-5 ml -CSF 1-3 ml -Body Fluid 3-50 ml	2-8 °C	4,200	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Mycophenolate(Cellcept)(Chula)	N981	23 days	Emit-Mycophenolic acid assay	ug/ml	EDTA whole blood 6 ml (minimum 3 ml)	2-8 °C	1,330	Out Lab	
Mycoplasma IgG (BRIA)	P234	5 Day	ELISA		Serum 500 uL	2-8 °C	650	Out Lab	
Mycoplasma IgG (Titer) (BPL)	P237	3 days	IFA	Negative (<1:10)	serum 1-2ml (minimum 200ul)	2-8 °C	1,250	Out Lab	
Mycoplasma IgM	P235	4 days	ELISA	Negative	serum 1 ml	2-8oC	400	In Lab	/
Mycoplasma IgM (Titer) (BPL)	P236	3 days	IFA	Negative (<1:100)	serum 1-2ml (minimal volume 200 ul)	2-8 °C	1,250	Out Lab	
Mycoplasma pneumoniae antibody	P230	2 days	Gel particle agglutination	< 1:40	serum 1 ml	2-8 °C 5days	400	In Lab	
Mycoplasma pneumoniae PCR	M250	3 days	Real-time PCR (Taqman probe) for M. pneumoniae P1 gene		Nasopharyngeal aspirate/Nasal wash/Sputum 1 mL Nasal swab/Nasopharyngeal swab/Throat swab (Swab must be sterile Dacron, nylon, or rayon with plastic shafts)	2-8°C	3,100	In Lab	/
myNIPS (myGenome)	MM603	9 Days	Next generation sequencing [NGS] with (Counting Method)		Whole blood in Streck tube 7-10 cc. (1 tube) using special collection kit	Room Temperature	16,500	Out Lab	
Myoglobin (Serum)(Rama)	C092	9 days	chemiluminescence		serum 2 ml,	2-8 °C	840	Out Lab	
Myoglobin (urine) (BRIA)	C671	20 days	ECL (Electrochemiluminescence immunoassay)	< 21 ug/L	random urine 30 ml	stability 2-8 oc 7 days	4,200	Out Lab	
Myositis profile	T265	1 day	Immunoblot	Negative	serum 1 ml	2-8 °C	3,500	In Lab	/
Myositis profile 16 Antibodies	T218	2 day	Immunoblot	Negative / Positive	serum 1 ml	2-8 °C	3,280	In Lab	/
Myositis profile 18 Antibodies	T061	2 day	Immunoblot	Negative	serum 1 ml	2-8 °C	3,350	In Lab	
Myotonic dystrophy type 1, DMPK gene (Siriraj)	MM989	2 month			EDTA blood 6-10 ml	2-8 °C	5,800	Out Lab	
Myriad Endopredict(Atlanta)	M972	16 days	Analysis of tumour genes in combination with the classical prognostic factors of nodal status and tumour size.		FFPE tumour sample (in order of preference: tumour section scraped into a microtube, or unstained slide with adjacent stained section, or whole block)	Room Temperature	144,000	Out Lab	
Myriad myRisk(Atlanta)	M971	42 days	Next Generation Sequencing (NGS)		7 ml EDTA whole blood (in special collection kit) ทาง Myriad แจ้งว่า ไข่ 6 ml ใต้ ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Room Temperature	180,000	Out Lab	
Neisseria gonorrhoea Antigen screening test	P876	1 hr		Negative	Urethral swab or Endocervical swab	1 Swab can be stored : 24 hrs at room temp , 1 week at 4 C 2 The extracted specimen can remain at room temp for 60 minutes .	450	In Lab	
Neopterin and Biopterin Profile (Thai cell Fix)	C695	23 days	LC/MS-MS , Spectrophotometry		First morning urine 10 ml. in special kit	Frozen (stability 4 weeks)	14,250	Out Lab	
Neurofibromatosis type 1 and Neurofibromatosis-Like syndrome (NF1 & SPRED1)(TDL,UK)	M733	2 months	Neurofibromatosis Type 1 test consists of full sequencing + deletion/duplication analysis of NF1 (chr.17) and SPRED1 (causing Legius/NF1-Like Syndrome).		EDTA whole blood 5 ml	room temperature	63,500	Out Lab	
Neurofibromatosis type 2 (sequence analysis of NF2 gene) (CGC genetics)	M601	67 days	PCR sequence analysis	N/A	EDTA whole blood 3 ml	Room temp (20-25 °C)	44,500	Out Lab	
NeuroGenomic™ Profile (Buccal swab)(Thai cell Fix)	B402	31 Days			Buccal swab in special kits	.	16,480	Out Lab	
Neuron Specific Enolase	N435	1 day	Electrochemiluminescence immunoassay "ECLIA"		serum 1 ml (no hemolysis)	2-8oC	800	In Lab	
Nevirapine (NVP) (RAMA)	V690	11 days	HPLC		EDTA whole blood 6 mLor EDTA plasma 2 mL [Centifuge 1500 rpm 15 minute]	EDTA Whole blood 2-8 °C 6 Hr, Plasma -20 °C 48 Hr.	1,330	Out Lab	
Newborn Metabolic Disorders Screening (48 types of disorders)(BGI)	C205	16 Days	LC-MS/MS		Dried Blood Spot, At least three drops of blood from heel (around 50 µL per drop) on Guthrie card.	should be stored at 4 °C temporarily and delivered to the lab at room temperature in 3 days	4,900	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Newborn screening (NBS) test panel (KK Women's and Children's Hospital ,Singapore)	C876	12 days	LC-MS/MS		Dried blood spot collected on Guthrie filter card within 24-72 hours of life	should be stored at 4 °C temporarily and delivered to the lab at room temperature in 3 days	12,240	Out Lab	
Newborn screening for Congenital Hypothyroidism (ATGenes)	C879	12 Days	Fluorometry		Dried blood spot on filter paper	Room temp.	1,000	Out Lab	
Newborn screening for Thalassemia (ATGenes)	C878	16 Days	Capillary Electrophoresis		Dried blood spot on filter paper	Room temp.	2,800	Out Lab	
NGAL (neutrophil gelatinase-associated lipocalin)(Rama)	C684	3 days	Chemiluminescence : ARCHITECT		random urine 20 ml (urine only)	2-8 oC (stability 7 days)	3,000	Out Lab	
NGAL(Chula)	C701	3 days	Rapid ELISA		Random urine 1 ml. or EDTA Whole blood 3 ml.	2-8 °C (Stability 24 ชม.)	2,500	Out Lab	
Nickel (Blood)	V615	8 days	GF-AAS		serum 2 ml	2-8 °C	400	Out Lab	
Nickel in Blood (ICP-MS)	S050	within 7 days	ICP-MS	Normal person: < 2.00 ug/L Exposed person: < 10.00 ug/L	EDTA Whole Blood 1 mL	Store at 2-8 °C	430	In Lab	/
Nickel in Urine (ICP-MS)	S051	within 7 days (except check up group maybe longer)	ICP-MS	Normal person: < 5.00 ug/L Exposed person: < 70.00 ug/L	Random urine 5-10 mL	Store at 2-8 °C	380	In Lab	/
Nicotine and Metabolites (Rama)	V551	11 days	GC/MS		Random Urine 10 ml	2-8 °C	1,250	Out Lab	
NIFTY Test [BGI Thailand]	M766	16 Days	Massively parallel Sequencing		Whole blood 10 ml in Streck tube (Special kit)	Room Temperature (อุณหภูมิไม่ควรเกิน 40C)	22,000	Out Lab	
Nipah Virus (nested RT-PCR) [Chula]	H165	11 days	nested RT-PCR	-	serum , CSF , urine 2 ml , or throat swab in sterile container	2-8 °C	1,730	Out Lab	
NIPS (Non Invasive Prenatal Screening)(Bio Space)	M926	14 days	Next generation sequencing [NGS] with chromosome counting algorithm		Maternal blood 10 ml in Streck tube (Special kit)	Room temperature	22,000	Out Lab	
NIPS+ (Non Invasive Prenatal Screening Plus 20 microdeletions)(Bio Space)	M966	14 days	Next generation sequencing [NGS] with chromosome counting algorithm		Maternal blood 10 ml in Streck tube (Special kit)	Room temperature ,no freeze	37,000	Out Lab	
NMO IgG (Anti -AQP4)	T784	8 days	IFA	Negative	Serum 1 ml	2-8 °C	1,730	In Lab	
NMO IgG (Anti -AQP4)(CSF)	T786	8 days	IFA	Negative	CSF (minimum volume 500 ul)	2-8 °C ,Stability 14 days	1,730	In Lab	
NMO IgG (Anti-AQP4) (Chula)	T785	30 Days	microscopic immunofluorescence		serum 2 ml or CSF 2 ml. If both types of sample were sent, the price would be charge for double.	2-8 °C	1,900	Out Lab	
NMO IgG(Prasat Neurological Institute)	T787	16 days	Cell based assay	Negative < 1:10	1. Serum 2 ml. (minimum 2 ml) or 2. CSF 0.5-1 ml. (minimum volume 500 ul)	2-8 °C	2,030	Out Lab	
N-myc amplification by FISH [Rama]	B044	9 days	FISH		1. EDTA or Heparinized whole blood 3-5 ml in case of metastatic cancer to blood circulation or 2. paraffin block (Request with code R887, section for 4 slides)	room temp	3,750	Out Lab	
Nocardia culture (Rama)	E517	16 days	culture		Specimen in sterile container	Room temp	870	Out Lab	
Nocardia Identification(by sequencing)&Sensitivity (Rama)	E127	11 days	Identification by sequencing ,sensitivity by MIC		Colony on plate	room temp.	3,750	Out Lab	
Non Hodgkin Lymphoma panel (RAMA)	A826	9 days	Flow cytometry		1. EDTA peripheral blood 5 ml or 2. Heparinized peripheral 5 mL or 3. Heparinized bone marrow 5 ml or EDTA bone marrow +2 slides of bone marrow smear (Unstain) 4. other body fluid 10 ml in sterile container	room temp	7,500	Out Lab	
Normetanephrine, Urine-HPLC (24-h Urine)	S215	within 10 days	HPLC	Male : 18-40 years 0.0-659.5 µg/24h 40-60 years 0.0-778.6 µg/24h >60 years 0.0-824.4 µg/24h Female : 18-40 years 0.0-549.6µg/24h 40-60 years 0.0-632.0 µg/24h >60 years 0.0-668.7 µg/24h	24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volumn.	Store at 2-8 °C .	2,480	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Norovirus PCR [NIH]	H185	11 days	Real time PCR		Stool in clean containers 5 -10 mL	2-8 °C	2,700	Out Lab	
Norovirus RT-PCR [BML]	M257	2 Days	Real-time RT-PCR (Taqman probe) for Norovirus ORF1/2 junction region		Fresh stool in sterile container (The best way to detect norovirus is in stool specimens collected when a person has acute illness (within 48 to 72 hours after they get symptoms). Norovirus can sometimes be found in stool specimens collected 2 weeks after a person recovers.) https://www.cdc.gov/norovirus/hcp/diagnosis-treatment.html	2-8oC	2,850	In Lab	
Norovirus screening	D395	1 day	Immunochromatography		Stool (Sterile container)	2-8 °C	800	In Lab	
NPM1 Gene mutation in AML (Rama)	MM934	16 days	Fluorescent based PCR technique using capillary electrophoresis		EDTA Whole Blood 1 - 3 ml OR EDTA Bone marrow 1 - 3 ml.	2-8°C	3,220	Out Lab	
NPM1 mutation (Exon 12 Analysis) [BML]	M365	10 Days	PCR and direct sequencing for NPM1 exon 12 mutation		EDTA Whole Blood 1 - 3 ml EDTA Bone marrow 1 - 3 ml.	2-8°C	4,000	In Lab	
NRAS mutation (Fast-track) [BML]	M496	5 days	Automatic deparaffinized tissue (Xylene freed), extraction and multiplex Real-time PCR using Idylla NRAS mutation test (Biocartis)		Formalin-Fixed, Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	13,330	In Lab	
NRAS mutation test (Codon12,13,61)(BML)	M452	10 days	Real-time PCR (ARMS) for NRAS exon 2 and 3		Formalin-Fixed, Paraffin-Embedded (FFPE) block containing at least 50% tumor cells and pathology report must accompany specimen in order for testing to be performed	Room temperature	8,000	In Lab	/
NT-Pro BNP	N170	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	1,800	In Lab	/
NutriFitGeneInsight (ThaiStemLife)	B421	42 days	N/A	-	Buccal swab (in special test kit)	Room temp (stability 3 months)	34,000	Out Lab	
Nutrition Sensor (Rapport/Genosense)	B622	35 days	SNPs		Buccal swap in special kit	Room Temperature	20,860	Out Lab	
Obesity Genetic Profile(CGC genetics)	M689	37 Days			Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	19,400	Out Lab	
Obesity genetic testing (CGC genetics)	M640	37 Days	Microarray technique		EDTA whole blood 3 ml	Room temp. (20-25 °C)	20,800	Out Lab	
Occult blood (Fecal immunochemical test)	D330	1 day	Chromatographic Immunoassay		Stool (Sterile container)	room temp	100	In Lab	
O-cresol (Toluene,Thinner metabolites) (Rama)	V588	9 days	HPLC Fluorescence	< /= 0.3 mg/g creatinine	Urine 50 ml , end of shift	2-8 °C	580	Out Lab	
Oculopharyngeal muscular dystrophy(OPMD)(Siriraj)	B028	2 months	Polymerase chain reaction (PCR) ตาบดด้วย direct DNA sequencing		EDTA whole blood 10 ml	2-8 °C	3,700	Out Lab	
OF test for hereditary spherocytosis (serial dilution)(Siriraj)	A746	7 days	serial NSS dilution OF test	N/A	Fresh EDTA whole blood 3 ml	2-8 °C	300	Out Lab	
OF test(Osmotic fragility)	A795	1 day	KKU test	Negative	EDTA Blood 2 ml (Fresh)	2-8 °C	150	In Lab	
Oligoclonal Band (Chula)	T761	30 Days	IEF (isoelectric focusing)	-	Serum 2 ml & CSF 2 ml	2-8 °C	2,640	Out Lab	
Oligoclonal Band(Siriraj)	T760	11 days	Electrophoresis		Serum 2 ml & CSF 2 ml	2-8 °C stability for 7 days Room temperature stability for 2-3 days Freeze - 20 °C stability for 30 days	850	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
OncoDEEP(NRB Group)	MM736	23 days	NGS and IHC		1 FFPE block or 25 unstained slides **Pathology report must be attached with FFPE block or unstained slide** 1. ส่งโดยใช้ชุดเก็บของ OncoDNA เท่านั้น 2. แพทย์+คนไข้ สามารถเขียนใบ Request + Consent form ระหว่างรอชุดตรวจได้ โดยโหลดใบ Request + Consent form จาก Salesforce 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Room temperature	224,800	Out Lab	
OncoSNAP NoNET (9 genes mutations) (Sanomics)	MM592	14 Days	Real-time PCR		FFPE Tissue with tumor content >30% with Pathology report and H&E Slide	Room temperature	67,200	Out Lab	
OncoSTRAT&GO(NRB Group)	MM735	23 days	NGS and IHC		1) Blood sample (2 Streck tubes of 10 ml each) And 2) 1 FFPE block or 25 unstained slides **Pathology report must be attached with FFPE block or unstained slide** 1. ส่งโดยใช้ชุดเก็บของ OncoDNA เท่านั้น 2. แพทย์+คนไข้ สามารถเขียนใบ Request + Consent form ระหว่างรอชุดตรวจได้ โดยโหลดใบ Request + Consent form จาก Salesforce 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM	Room temperature	255,950	Out Lab	
Oncotype DX-Breast (Biostem)	M735	23 Days	Reverse Transcriptase PCR (RT-PCR)		Formalin-fixed, paraffin-embedded (FFPE) breast cancer tissue block 1. ใช้ชุดตรวจของ Oncotype เท่านั้น 2. ให้แพทย์เขียนใบ Request ให้เรียบร้อย (หากไม่มีชุดตรวจสามารถเขียนใบ request ล่วงหน้าได้ โดย Load จาก Salesforce) 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง ห้ามส่งให้ SPM / Outlab โดยตรง	Room temp.	196,000	Out Lab	
Oncotype DX-Colon (Biostem)	M736	23 Days	Reverse Transcriptase PCR (RT-PCR)		Formalin-fixed, paraffin-embedded (FFPE) colon cancer tissue block	Room temp	196,000	Out Lab	
One Day Hormone Check (Thai cell Fix)	C816	17 Days			5ml saliva x 5 tube	x	23,370	Out Lab	
Opiate (KIMS)	V715	1 day	kinetic interaction of microparticles in a solution (KIMS)		Random urine 5 ml	2-8 °C	300	In Lab	/
Opiates Panel (GC/MS)(Rama)	V808	9 days	Gas Chromatography/Mass Spectrometry (GC/MS)	not detected	Serum/EDTA plasma 2 ml. or urine 30 ml.	2-8 °C	2,100	Out Lab	
Optimal Nutritional Evaluation (Urine)(Thai cell Fix)	C874	23 days			First morning urine (if urinate within 6hrs. before rising time should refrigerated before send)	Frozen (ship at 0 oC and below) stability 7 days	34,000	Out Lab	
Organic Acids, Metabolic Profile (urine) [ADL]	C985	23 days			random urine in special kit	2-8 °C	15,000	Out Lab	
Organophosphorous screening(GC/MS)(Siriraj)	V752	5 days	GC-MS	N/A	Gastric contents 20 ml	2-8 °C	1,800	Out Lab	
Oseltamivir-Resistant Influenza Viruses(Department of Medical sciences)	MM605	4 days	PCR	-	Nasopharyngeal / throat swab in VTM	2-8 °C	1,730	Out Lab	
Osmolality (Blood)	N830	1 day	freezing point depression		serum 1 ml	2-8oC	390	In Lab	/
Osmolality (Urine)	N840	1 day	freezing point depression		Ranrom urine 1 ml	2-8oC	390	In Lab	/
Osteocalcin	N075	1 day	Electrochemiluminescence immunoassay (ECLIA)		EDTA plasma 1 ml (fasting)	2-8 °C	1,700	In Lab	
Overlapping ARD1	T537	2 day	IFA+ELISA+Immunoblot	Negative	Serum 2 ml	2-8 °C	5,200	In Lab	
Overlapping ARD2	T538	2 day	IFA+ELISA+Immunoblot	Negative	Serum 2 ml	2-8 °C	5,300	In Lab	
Oxalate, Urine (Siriraj)	D202	9 days		No.	Random Urine, 24 hr Urine ปริมาตร 30 ml (No preservative or preserved by Sodium azide)	2-8 °C	1,800	Out Lab	
Oxidative stress (Biovis 100)	C691	16 days	N/A	-	serum 3 ml x2 tubes	frozen	12,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Oxidative Stress 2.0 (Blood)(Thai cell Fix)	C333	17 Days			2 SST (2 serum samples, 4ml each) and 1 EDTA (whole blood, 7ml)	X	19,500	Out Lab	
Oxidative Stress 2.0 (Urine)(Thai cell Fix)	C734	17 Days			5ml unpreserved urine	x	18,050	Out Lab	
P1NP	N008	1 day	Electrochemiluminescence immunoassay (ECLIA)		EDTA plasma 1 ml (fasting)	2-8 °C	700	In Lab	
Package ANCA with anti GBM	T917	7 days	IFA	Negative	serum 1 ml	2-8oC	3,720	In Lab	
Package Antiphospholipid Syndrome (6 Tests)	T211	5 days	ELISA	Anti Cardiolipin IgG,M,A < 12 PL-IgG or IgM or IgA-U/ml negative >= 12 PL-IgG or IgM or IgA-U/ml positive Beta 2 glycoprotein IgG ,M,A > 20 RU/ml Negative >= 20 RU/ml Positive	Serum 1ml	2-8oC 14 days	3,350	In Lab	
Package Antiphospholipid Syndrome (7 Tests)	T219	5 days	ELISA	Anti Cardiolipin IgG,M,A < 12 PL-IgG or IgM or IgA-U/ml negative >= 12 PL-IgG or IgM or IgA-U/ml positive Beta 2 glycoprotein Ig,M,A > 20 RU/ml Negative >= 20 RU/ml Positive Lupus APTT FSL Screen APTT FS Confirm dRVVT Screen dRVVT Confirm	Serum 1ml + Na Citrate plasma 1 ml	2-8oC 14 days Serum Freeze Na Citrate plasma	3,650	In Lab	
Package Autoimmune Rheumatic Diseases (14 Tests)	T212	2 day	IFA+ELISA+Immunoblot	N/A	Serum 2 ml	2-8 °C	2,100	In Lab	
Package Comprehensive Prevention for Couple at Risk Assessment of Thalassemia(ATGenes)	MM978	12 days	CBC, Hb-typing, DNA test		3mL EDTA Blood (Couple)	Room Temperature	5,600	Out Lab	
Package First Trimester Screening and Pre-eclampsia	T918	9 days	Time Resolved Fluorescence (TRF)		serum 2 ml	2-8oC 48 hrs -20oC long term	2,600	In Lab	
Package Premium Prevention for Couple at Risk Assessment of Thalassemia(ATGenes)	MM977	23 days	CBC, Hb-typing, DNA test		3mL EDTA Blood (Couple)	Room Temperature	9,100	Out Lab	
PAI-1 Gene Promoter Polymorphism (4G/5G) [BML]	M399	10 DAYS	PCR and direct sequencing for PAI-1 4G/5G promoter polymorphism		EDTA BLOOD 3-5 ML	ROOM TEMPERATURE 24 HR 2-8oC 1 MONTH	4,060	In Lab	
p-ANCA /Anti-MPO	T500	5 Days	ELISA	< 20 RU/ml negative >= 20 RU/ml positive	serum 1 ml	2-8oC	600	In Lab	
Pancreatitis (PRSS1)	B416	30 days	polymerase chain reaction (PCR) ตามด้วย direct DNA sequencing	-	EDTA blood 6-10 ml	2-8 °C	5,000	Out Lab	
Pancreatitis (SPINK1)	B415	30 days	polymerase chain reaction (PCR) ของ exon 3 ตามด้วย direct DNA sequencing	-	EDTA blood 6-10 ml	2-8 °C	3,700	Out Lab	
Panel of rearrangements associated with autism (CGC genetics)	M675	37 Days	MLPA		Peripheral Blood (EDTA tube) 3 mL	Room temp. (20-25 °C)	18,700	Out Lab	
Panorama Extended Panel (BCC)	MM503	14 days	NATUS (Next-generation Aneuploidy Testing Using SNPs) algorithm evaluates specific maternal and fetal DNA found in the mother's blood.		2 tubes of 10 mL each of maternal blood	Room temperature	23,500	Out Lab	
Panorama NIPT plus 22q11.2 microdeletion (BCC)	MM502	14 days	NATUS (Next-generation Aneuploidy Testing Using SNPs) algorithm evaluates specific maternal and fetal DNA found in the mother's blood.	N/A	2 tubes of 10 mL each of maternal blood	Storage at room temperature	23,000	Out Lab	
Panorama NIPT(BCC)	MM501	14 days	NATUS (Next-generation Aneuploidy Testing Using SNPs) algorithm evaluates specific maternal and fetal DNA found in the mother's blood.		2 tubes of 10 mL each of maternal blood	Room temperature	21,000	Out Lab	
Panorama Prenatal Panel (Thailand) (BCC)	MM799	21 days			2 tubes of 10 mL each of maternal blood (Special kit)	Room Temperature (20-30oC)	16,000	Out Lab	
Paracetamol	V750	2 days	Enzyme, Acyl Amidohydolase		serum 1 ml	2-8 °C	500	In Lab	/
Paracetamol(Screening in Gastric)	V863	5 days	color test	N/A	Gastric contents 20 ml	2-8 °C	450	Out Lab	
Paradigm Cancer Diagnostic (NGS Analysis & IHC)(PCDx)	MM764	16 days	NGS and IHC		FFPE Block (Special Kit) (≥15% tumor content) 1. ระบุชนิดของ Paradigm เท่านั้น 2. เขียนใบ Request ให้เรียบร้อย สามารถเขียนใบ Request ล่วงหน้าก่อนได้โดยขอไฟล์จาก Salesforce 3. ต้องส่งให้แล็บ BML ตรวจสอบก่อนทุกครั้ง	Room Temperature	288,000	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Paragonimus antibody (Tropmed)	P715	16 days	immunoblot		serum 1 ml	2-8 °C	700	Out Lab	
Parainfluenza Virus Antigen (Chula)	H140	5 days	IFA	N/A	Nasopharyngeal aspirate / wash in VTM	2-8 °C	1,730	Out Lab	
Parainfluenza Virus Isolation	P727	30 Days	cell culture		Nasopharyngeal Aspirate (or swab) , throat swab , sputum (all of these preserved in Flu VTM)	2-8 °C	1,800	Out Lab	
Paraneoplastic antibodies (Chula)	T518	30 Days	microscopic immunofluorescence		serum 2 ml or CSF 2 ml. If both types of sample were sent, the price would be charge for double.	2-8 °C	3,000	Out Lab	
Paraneoplastic Neurologic Syndromes 12 Ag (IgG)	T533	2 days	Immunoblot	Negative / Positive	serum 1ml	2-8 °C	3,500	In Lab	
Paraneoplastic screening (IFA)	T509	7 days	IFA	Negative	1. serum 1 ml or CSF 1ml	2-8 °C	3,450	In Lab	
Paraquat (RAMA)	V470	7 days	HPLC	0 ug/mL	EDTA whole blood 3 ml or clotted blood 5 ml (do not separate) or random urine 10 ml	2-8 °C	550	Out Lab	
Paraquat(Screening in Gastric) [Siriraj]	V864	5 days	color test	N/A	Gastric contents 20 ml	2-8 °C	450	Out Lab	
Parasite Examination	D430	1 day	microscopic exam		Stool or sputum or body fluid	Room temperature	40	In Lab	
Parasite Identification (Confirm) [TROP Med]	D435	7 days	microscopic exam		Sputum or stool or any specimen	2-8 °C	410	Out Lab	
Parasite identification(Culture)(Trop Med)	D431	11 days	culture and microscopic exam	not found	stool , minimum 2 mg	room temp	300	Out Lab	
Parathyroid Hormone (Intact)	N720	1 day	Chemiluminescent microparticle immunoassay (CMIA)		EDTA plasma 1 ml	2-8 °C	700	In Lab	/
Parathyroid Hormone-Related Peptide (PTHrP)(Mayo)	N335	12 Days	Immunochemiluminometric Assay (ICMA)	< or =4.2 pmol/L	EDTA plasma 2 ml	Frozen : stability 30 days	16,000	Out Lab	
Partial Thromboplastin Time	K060	1 day	Automated Blood Coagulation Analyzer; Symex CS-2500		Na Citrate plasma 1 ml	Freeze	200	In Lab	/
Parvovirus B19 (DNA-PCR)(RAMA)	H030	5 days	Real-Time PCR	-	EDTA whole blood 3 ml /Plasma 2 mL (minimum 200 ul) / EDTA Bone marrow 7 ml. or Urine, CSF, Body fluid 500 ul	2-8 °C	2,700	Out Lab	
Parvovirus B19 IgG (Chula)	N256	11 days	ELISA	<4 IU/ml = Negative 4-5.5 IU/ml = Borderline >= 5.5 IU/ml = Positive	serum 1 ml	2-8 °C	750	Out Lab	
Parvovirus B19 IgM (Chula)	N255	11 days	ELISA	<0.8 Ratio = Negative 0.8- <1.1 Ratio = Borderline >= 1.1 Ratio = Positive	serum 1 ml	2-8 °C	750	Out Lab	
Parvovirus B19 Viral Load [Rama]	H031	5 days	Real-Time PCR		EDTA whole blood 3 ml /Plasma 2 mL or Urine, CSF, Body fluid 500 ul	2-8 °C	2,480	Out Lab	
PAT Test (Plasma Antioxidant Test)	C970	2 days	Kinetics	>2800 Very high value 2200-2800 Normal value 2000-2200 Borderline low range 1800-2000 Slight deficiency status <1800 Deficiency status	serum 1 ml (It is necessary to quickly centrifugate the sample and separate the plasma.)	48 hours at 2-8 C , 36 hours at room temp, 2 months at - 20 c (For serum or plasma)	950	In Lab	
PCR for Abnormal Hemoglobin [PCT Lab]	A813	16 days	PCR		EDTA whole blood 3 ml	2-8°C	3,000	Out Lab	
PCR for Hemoglobin J-Bangkok [PCT Lab]	A814	16 days	PCR		EDTA whole blood 5 ml	2-8 °C	2,500	Out Lab	
PDGFRA mutation test (RAMA)	MM551	20 Days			Formalin fixed, paraffin-embedded (FFPE) tissue and H&E slide **Pathology report must be attached	Room Temperature	13,580	Out Lab	
PDGFRA Mutations (Exon 12 and 18) (Sequencing) [BML]	M479	12 days	PCR and direct sequencing for exon 12 and exon 18 of PDGFRA gene	7-12% of GIST have PDGFRA exon 12 or 18 mutations	FFPE tissue + pathology report	Room temperature	12,000	In Lab	
PDGFRB/TEL Translocation (5;12) for chronic Myelomonocytic leukemia (CMML), FISH (Mayo)	B598	14 Days	Fluorescence In Situ Hybridization (FISH)		1. Sodium heparined whole blood 10 mL. or 2. Sodium heparined bone marrow 2 mL.	Storage 2 – 8°C or Ambient stability 5-7 days	39,700	Out Lab	
Peanut Component Panel (Quest Diagnostics)	J123	14 Days	Immunoassay(ImmunoCAP®)	Ara h 2 (f423) <0.10 kU/L Ara h 1 (f422) <0.10 kU/L Ara h 3 (f424) <0.10 kU/L Ara h 9 (f427) <0.10 kU/L Ara h 8 (f352) <0.10 kU/L	Serum 2 ml	Freeze	23,000	Out Lab	
Pemphigus Antibody (Inter cellular Antibody)(Institute of Dermatology)	T710	11 days	IFA=Indirect immunofluorescent	N/A	serum 1 ml.	Freeze	870	Out Lab	
Pendred syndrome (SLC26A4) (LMGG)	MM524	1 month	Next-Generation sequencing		EDTA blood 6 ml	2-8 °C	71,400	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Pepsinogen	N191	1 day	Chemiluminescent microparticle immunoassay (CMIA)		Serum 1 ml.	Serum can be stored at 2 -8 C up to 7 days . The whole clot blood can be stored up to 24 hours.	4,200	In Lab	
Performance & Weight Sensor(Rapport/Genosense)	B624	35 days	SNPs		Buccal swab in special kit	Room Temp.	27,860	Out Lab	
Performance Sensor (Rapport/Genosense)	B623	35 days	SNPs		Buccal swab in special kit	Room Temp.	17,360	Out Lab	
Peroxidase Stain	A690	11 days	Sato & Sekiya		2 Bone marrow smear , foil-wrap	2-8 °C	500	Out Lab	
PGD diagnosis for HbH-CS/PS disease (1 embryos)(ATGenes)	M746	4 Days	Whole genome amplification, Realtime gap-PCR for SEA, and Mismatch-PCR for HbCS/PS	No mutation	Day 3 or Day 5 embryo biopsy in lysis buffer	4 °C	12,500	Out Lab	
PGD diagnosis for HbH-CS/PS disease (1-5 embryos)(ATGenes)	M747	4 Days	Whole genome amplification, Realtime gap-PCR for SEA, and Mismatch-PCR for HbCS/PS	No mutation	Day 3 or Day 5 embryo biopsy in lysis buffer	4 °C	75,000	Out Lab	
PGD diagnosis for HbH-CS/PS disease (5-10 embryos)(ATGenes)	M748	4 Days	Whole genome amplification, Realtime gap-PCR for SEA, and Mismatch-PCR for HbCS/PS	No mutation	Day 3 or Day 5 embryo biopsy in lysis buffer	4 °C	125,000	Out Lab	
pH	D050	1 day	แถบทดสอบปัสสาวะรุ่น UC-3200 Cassette		urine or fluid	2-8oC	30	In Lab	
pH testing for food (AMARC)	C676	8 days			100 g./sample	2-8 °C	250	Out Lab	
Pharmaco sensor (Rapport/Genosense)	B613	35 days	SNPs		Buccal swab in special kit	Room Temp.	16,380	Out Lab	
Pharmacogenetics CYP1A2 (RAMA)	M777	7 days	Pyrosequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics CYP2A6 (RAMA)	M779	7 days	Pyrosequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics CYP2B6 (RAMA)	M780	7 days	Pyrosequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics CYP2C19 (RAMA)	M778	7 days	Luminex SSO-PCR for HLA-B	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	3,000	Out Lab	
Pharmacogenetics CYP2C9 (RAMA)	M781	7 days	Real time PCR	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics CYP2D6 (RAMA)	M782	7 days	PCR	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics CYP3A4 (RAMA)	M784	7 days	Pyrosequencing	-	EDTA whole blood 5 ml	2-8 °C	2,400	Out Lab	
Pharmacogenetics CYP3A5 (RAMA)	M783	7 days	Pyrosequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics for Abacavir (HLA-B*5701 allele) [BML]	M570	3 days	Real-time SSP-PCR		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,300	In Lab	/
Pharmacogenetics for Abacavir (HLA-B*5701 allele)(Chula)	B442	11 days	PCR-SSP		EDTA whole blood 3 ml	room temp	1,300	Out Lab	
Pharmacogenetics for Abacavir (HLA-B*5701) (RAMA)	M785	5 days	HLA-B sequencing	-	EDTA whole blood 5 ml	2-8 °C	2,400	Out Lab	
Pharmacogenetics for Allopurinol (HLA-B*5801 allele)(Chula)	B443	11 days	PCR-SSP		EDTA whole blood 3 ml	room temp	1,300	Out Lab	
Pharmacogenetics for Allopurinol (HLA-B*5801)(RAMA)	M786	5 days	HLA-B sequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics for Allopurinol(HLA-B*5801 allele)(BML)	M513	3 days	Real-time SSP-PCR assay		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (7 days)	1,100	In Lab	/
Pharmacogenetics for Carbamazepine (HLA-B*1502 allele)(Chula)	B444	11 days	PCR-SSP		EDTA whole blood 3 ml	room temp	1,300	Out Lab	
Pharmacogenetics for Carbamazepine (HLA-B*1502) (RAMA)	M787	5 days	HLA-B sequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics for Carbamazepine (HLA-B*1502)(BML)	M321	3 days	Real-time SSP-PCR		EDTA Whole Blood 3-5 mL	2-8°C	1,500	In Lab	/
Pharmacogenetics for Clopidogrel (RAMA)	M788	5 days	Luminex SSO-PCR for HLA-B	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics for Clopidogrel [BML]	M572	3 Days	Amplify CYP2C19 allele at *2 (c.681G>A), *3 (c.636G>A) and *17 (c.-806C>T) position and detect polymorphic allele for each position		EDTA whole blood 3-5 ml	2-8 °C	2,300	In Lab	
Pharmacogenetics for Nevirapine (HLA-B*3505 allele) [BML]	M571	3 days	Real-time SSP PCR	-	EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	1,800	In Lab	
Pharmacogenetics for Nevirapine (RAMA)	M789	5 days	HLA-B sequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	2,400	Out Lab	
Pharmacogenetics for Statin (SLCO1B1) (Atgenes)	MM079	12 days	Allele specific PCR for rs4149081 and rs4149056 polymorphisms		EDTA whole blood 3-5 ml	2-8°C	4,620	Out Lab	
Pharmacogenetics for Warfarin (RAMA)	M790	5 days	Real time PCR	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	3,500	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Pharmacogenetics in HLA-B Genotype (RAMA)	M791	5 days	HLA-B sequencing	-	EDTA whole blood 5 ml (minimum 3 ml)	2-8 °C	5,200	Out Lab	
Pharmacogenetics in Thioguanine (TPMT) (RAMA)	M775	5 days	Real time PCR	-	EDTA whole blood 5 ml	2-8 °C	3,000	Out Lab	
Pharmacogenetics in TPMT Activity(RAMA)	MM535	11 days	LC-MS-MS		EDTA whole blood 3-6 ml	2-8 °C	4,760	Out Lab	
Pharmacogenetics in TPMT Genotyping (Rama)	MM534	7 days	Real time PCR		EDTA whole blood 3-6 ml	2-8 °C	3,000	Out Lab	
Pharmacogenetics of Anti-angiogenics in Ophthalmology(CGC genetics)	M700	37 Days	PCR		Peripheral Blood (EDTA tube) 3 mL ไม่ต้องใช้ชุด kit ส่งมาใหม่ SPM outlab ส่งออกได้เลย	Room temp. (20-25 °C)	14,520	Out Lab	
Pharmacogenetics Package(ATGenes)	MM511	16 days	Various molecular method		6 mL EDTA blood	2-8 °C	32,780	Out Lab	
Phencyclidine (PCP)	V375	1 day	Immunochemistry		Random Urine 5 ml	2-8oC	440	In Lab	
Phenobarbital	V260	2 days	Chemiluminescent microparticle immunoassay (CMIA)	Therapeutic range 15 - 40 ug/ml	serum 1 ml	2-8 °C	450	In Lab	/
Phenol in Urine (HPLC)	S026	within 9 days (except checkup group)	High Pressure Liquid Chromatography (HPLC)	0.0 - 250.0 mg/g creatinine (ACGIH2020)	Random Urine 10-20 mL.(End of shift)	Store at 2-8°C	450	In Lab	/
Phenylketonuria (PAH) by Sequencing (LMGG)	MM593	30 days		N/A	EDTA Blood 3 ml x 2 Tubes	2-8 °C	23,800	Out Lab	
Phenylketonuria (sequence analysis of PAH gene)(CGC genetics)	M674	67 days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	42,500	Out Lab	
Phenytoin (Dilantin)	V240	1 day	kinetic interaction of microparticles in a solution (KIMS)		serum 1 ml	2-8 °C	400	In Lab	/
Phosphatidylglycerol [BRIA]	N590	23 days			Amniotic Fluid >= 10 mL	Frozen	20,000	Out Lab	
Phosphofructokinase(PFK)(Siriraj)	C978	11 days	Kinetic assay		EDTA whole blood 3 mL	2-8 oC , stability 24 hours	2,200	Out Lab	
Phosphoglycerate kinase(PGK)(Siriraj)	C976	11 days	Kinetic assay		EDTA whole blood 3 mL	2-8 oC , stability 24 hours	2,000	Out Lab	
Phospholipase A2 Receptor Ab (PLA2R)(Siriraj)	N731	19 days	ELISA		Plasma EDTA 2 ml or Serum 2 ml (Minimum 1 ml)	If send within day, separate plasma and keep in 4°C , If cannot send within day keep in -70°C or -20°C (in case of cannot freeze -70°C)	2,700	Out Lab	
Phospho-Tau protein (CSF)	N351	8 days	ELISA	< 61 pg/ml	CSF 1.8 ml in polypropylene tube	Freeze	16,000	In Lab	
PIGF (first trimester screening for pre-eclampsia)	C808	1 day	Electrochemiluminescence immunoassay (instrument-E601)	Reference range ช่วง 5-95 percentile ที่ 10+0-14+6 week คือ 28.8-122 pg/ml	Serum 1 ml	8 hours at 2-8 °C, 4 months at -20 °C	3,220	In Lab	
PIVKA-II	T213	1 day	Chemiluminescent microparticle immunoassay (CMIA)	Region ASIA 11.12 32.01 mAU/mL EU 17.36 50.90 mAU/mL	serum 1 ml	2-8oC	1,200	In Lab	
PIVKA-II and AFP	T214	1 day	Chemiluminescent microparticle immunoassay (CMIA)	PIVKA II Region ASIA 11.12 - 32.01 mAU/mL EU 17.36 - 50.90 mAU/mL AFP 0 - 7.00 ng/mL	serum 1 ml	2-8oC	1,300	In Lab	
Plasma for Amino Acid	C840	30 Days	HPLC		Litium heparinized plasma 3 ml , frozen	Frozen	5,180	Out Lab	
Plasma for Amino Acid(Chula)	C839	20 days	LCMS		Heparin whole blood 3 ml (minimum volume 2 ml)	2-8°C	3,250	Out Lab	
Plasma Renin Activity (Chula)	N820	No warranty turn around time	RIA	Recumbent = 0.2 - 2.85 ng/ml/hr angiotensin generated Upright = 1.5 - 5.7 ng/ml/hr angiotensin generated	EDTA plasma 2 ml	Freeze	1,100	Out Lab	
Platelet Count	A070	1 day	หลักการ electrical resistance และ hydrodynamic focusing method โดยเครื่อง sysmex XT-4000i		EDTA Blood 2 ml	2-8 °C	60	In Lab	
PML/RARA fusion gene (FISH)(Chromosome Center)	N790	16 days	FISH		Heparinized whole Blood 5 ml or Heparinized Bone marrow 5 ml	2-8 °C	4,500	Out Lab	
PML/RARA fusion gene (FISH)(Rama)	B312	23 days	FISH		Heparinized whole blood or Heparinized bone marrow 3 ml or EDTA whole blood	2-8 °C	4,030	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
PML/RARA(Promyelocytic leukemia gene) (Siriraj)	A850	9 Days	nested RT-PCR		1. EDTA bone marrow 3-6 ml + bone marrow smear with Wright's stain(additional) or 2. EDTA whole blood 6 ml	*Should be sent within 24 hours after sample collecting (2-8 °C). Please send specimen to N Health before 12.00 AM. *Subcontractor do not accept specimens on public holidays.	4,000	Out Lab	
PND for Alpha thalassemia (ATGenes)	M915	16 Days	Real-time PCR with high resolution melting (HRM) curve analysis# (multiplex set and confirm by a single-plex set)		Amniotic fluid (7-10 ml) + เลือดแม่ (EDTA blood 3 ml) + ผล alpha thalassemia ของพ่อ-แม่ (ห้าม น้ำคร่ำมี Hemolysis เพราะอาจมี เซลล์แม่ปนมาในน้ำคร่ำ) หากไม่มี ผล alpha thalassemia ของพ่อ-แม่ ต้องส่ง alpha thalassemia ของ พ่อ-แม่ด้วย (M421) Amniotic fluid (7-10 ml) + Mother blood (EDTA blood 3 ml) + Parent's alpha thalassemia results (Father and Mother) Amniotic fluid must have no hemolysis In case of no parent's thalassemia results, parents must be tested for alpha thalassemia (M421)	2-8 °C เก็บได้ 7 วัน	3,800	Out Lab	
PND for Beta thalassemia (ATGenes)	M916	16 Days	Real-time PCR with HRM analysis for common beta globin mutations (confirm the detected mutations by direct genomic sequencing)		Amniotic fluid (7-10 ml) + เลือดแม่ (EDTA blood 3 ml) + ผล beta thalassemia ของพ่อ-แม่ (ห้าม น้ำคร่ำมี Hemolysis เพราะอาจมี เซลล์แม่ปนมาในน้ำคร่ำ) หากไม่มี ผล beta thalassemia ของพ่อ-แม่ ต้องส่ง beta thalassemia ของพ่อ-แม่ด้วย (M427 คีย์ ต่อคน) Amniotic fluid (7-10 ml) + Mother blood (EDTA blood 3 ml) + Parent's beta thalassemia results (Father and Mother) Amniotic fluid must have no hemolysis In case of no parent's thalassemia results, parents must be tested for beta thalassemia (M984)	2-8 °C สามารถเก็บไว้ได้ 7 วัน	3,800	Out Lab	
Pneumocystis carinii (Giemsa) [Siriraj]	E111	6 days	Giemsa stain		sputum or bronchial wash	2-8 °C	500	Out Lab	
Pneumocystis carinii (GMS)(Siriraj)	E118	8 days	GMS stain (Gomori methynamine silver stain)		sputum or bronchial wash	2-8 °C stability 2-3 days	450	Out Lab	
Pneumocystis PCR (Chula)	E108	9 days	PCR		BAL or Bronchial wash 3-5 ml., Sputum	2-8 °C	1,040	Out Lab	
Pneumocystis jirovecii (IFA)(Chula)	E107	7 days	IFA		BAL or Bronchial wash 3-5 ml.	2-8 °C	1,300	Out Lab	
Pneumocystis jirovecii (PCP) PCR	M254	3 Days	Real-time RT-PCR (Taqman probe) for PCP Mitochondrial LSU rRNA (mtLSU)		BAL 2-3 ml SPUTUM 1-2 ml Pleural fluid 2-3 ml Pleural tapping 2-3 ml	2-8 °C	3,250	In Lab	
Poliovirus Isolation and PCR (NIH)	H088	30 Days	cell culture and real-time RT-PCR		stool 8 gm in sterile container (rectal swab is unacceptable) ,should be collect 2 samples ** The second sample should be collected iwithin 24-48 hours after first sampling.	freeze	3,800	Out Lab	
Porphobilinogen	D200	9 days	Spectrophotometry		random urine 50 ml (protected from light)	2-8 °C	410	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Porphyrins , urine (Biostem)	C855	23 days	N/A		First morning urine 10-30 ml , collected in special kit , protected from light	2-8 °C	13,750	Out Lab	
Posaconazole level (Siriraj)	V796	9 days	Ultra Performance Liquid Chromatography (UPLC)		Lithium heparin 3-5 ml(only) or Lithium heparinized Plasma 2 ml.	Whole blood Room temp stability 4 Hr., Plasma 2-8 °C stability 24 Hr., Plasma freeze stability 1 month	1,650	Out Lab	
Postnatal Chromosomal microarray : parental follow-up study (per sample)(TRG)	MM739	16 days			EDTA blood 6 ml	2-8 °C	37,700	Out Lab	
Postnatal Chromosomal microarray :Trio analysis(TRG)	MM740	30 days			EDTA blood 6 ml/ Person (1-3 Persons)	2-8 °C	210,000	Out Lab	
Postnatal Chromosomal microarray:index case(TRG)	MM738	16 days			EDTA blood 6 ml	2-8 °C	40,000	Out Lab	
Potassium	C510	1 day	Indirect ISE		serum 1 ml (no hemolysis)	2-8 °C	65	In Lab	/
Potassium (24 Hrs Urine)	C450	1 day	Ion-Selective electrode diluted (Indirect)		24 hrs-urine (No preservative)	2-8 °C	65	In Lab	/
Potassium (Random Urine)	C451	1 day	Indirect ISE		Random urine 5 ml	2-8 °C	65	In Lab	/
Prader Willi Syndrome-FISH	B315	16 days	FISH	N/A	Heparinized whole blood 3 ml	2-8 °C	4,200	Out Lab	
Prader-Willi Syndrome [Rama]	MM573	60 days	SNRPN methylation specific PCR		EDTA blood 3-5 ml	2-8oC	3,500	Out Lab	
Prader-Willi/Angelman syndrome by MS-MLPA (LMGG)	MM067	23 days	MS-MLPA		EDTA blood 6 ml	2-8 °C	21,000	Out Lab	
Prealbumin	N190	1 day	Immunoturbidimetric	20.0-40.0 mg/dL	serum 1 ml	3 days at 2-8 °C 6 months at (-15)-(-25) °C	750	In Lab	
Preeclampsia (sFlt-1/PlGF ratio)	C887	1 day	Electrochemiluminescence immunoassay (ECLIA)		Serum 1 ml	8 hours at 2-8 °C, 4 months at -20 °C	4,200	In Lab	
PregnancyTest	D120	1 day	Immunochromatography		Random urine 5 ml	2-8 °C	100	In Lab	/
Pregnenolone, LC/MS/MS [Questdiagnostic]	N503	15 Days	LC/MS/MS [Liquid Chromatography/Tandem Mass Spectrometry]	Reference Range(s) Adult 22-237 ng/dL Pediatric 1-59 Days 68-1303 ng/dL 60 Days-1 Year ≤219 ng/dL 2-6 Years ≤140 ng/dL 7-9 Years ≤156 ng/dL 10-12 Years 15-220 ng/dL 13-17 Years 12-196 ng/dL	Serum 2 ml (DO NOT USE GEL TUBES)	Frozen stability : 14 Days	17,900	Out Lab	
Premature Ovarian Failure (FMR1 gene, conventional PCR)(CGC genetics)	M673	37 Days	PCR		EDTA whole blood 3 ml	Room temp. (20-25 °C)	22,210	Out Lab	
Premature Ovarian Failure (FMR1 gene, msTP-PCR)(CGC genetics)	M672	37 Days	msTP-PCR		EDTA whole blood 3 ml	Room temp. (20-25 °C)	25,700	Out Lab	
PREMIUM PLUS & ADHD sensor (Rapport/Genosense)	B616	35 days	SNPs		Buccal swab in special kit	Room Temp.	89,740	Out Lab	
PREMIUM PLUS Female (Rapport/Genosense)	B615	35 days	SNPs		Buccal swab in special kit	Room Temp.	85,120	Out Lab	
PREMIUM PLUS Male (Rapport/Genosense)	B614	35 days	SNPs		Buccal swab in special kit	Room Temp.	85,120	Out Lab	
Premium Prevention for Thalassemia (ATGenes)	M918	23 Days	CBC+Hb typing + DNA test		3-6 mL EDTA blood	2-8 °C	6,800	Out Lab	
Prenatal array CGH + SNPs(BCC)	MM990	21 days	CytoArray UPD: detection of CNVs and Uniparental disomies (UPD) (498 regions, 180K).		Amniotic fluid 20 ml	Room temperature (over night storage at 2-8 oC)	38,000	Out Lab	
Prenatal array CGH 60K(BCC)	MM976	23 Days	Comparative Genome Hybridization (CGH) in Cytoarray Oligo ISCA (60K) based in the genome construction hg19. The microarray contains more than 60.000 probes, especially designed to detect the copy number variations in regions related to mental retardation, developmental retardation, or polymalformative syndrome, among others. A commercial diploid DNA without alterations was used as a reference. The DLRS obtained was 0,23 (cap 0,30). The detection of aberrations has been analyzed using the Agilent Genomic Workbench 7.0 software and the algorithm ADM-2 to detect variations with a threshold value of 6.0. It is accepted as aberration those that have a minimum of five consecutive probes.		5-10 ml Amiotic Fluid	Room temperature	40,000	Out Lab	
Prenatal BoBs (TDL,UK)	M900	14 Days	BACs-on-Beads (BoBs™) assays		5 mls (non-bloodstained) amniotic fluid	Room Temp	22,000	Out Lab	
Prenatal diag for Alpha Thal (Fetal)(Chula)	A040	23 days	PCR		Amniotic Fluid 20 ml or EDTA cord blood 2 ml stability for amniotic fluid within 24 hours	2-8 °C	2,750	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Prenatal diag for Alpha Thal (Father)(Chula)	A014	23 days	PCR		EDTA whole Blood 5 ml	2-8 °C	2,750	Out Lab	
Prenatal diag for AlphaThal (Mother)(Chula)	A035	23 days	PCR		EDTA whole Blood 5 ml	2-8 °C	2,750	Out Lab	
Prenatal diagnosis for Beta-thalassemia (Father)(Chula)	A011	23 days	PCR		EDTA whole Blood 5 ml	2-8 °C	3,125	Out Lab	
Prenatal diagnosis for Beta-thalassemia (Fetal)(Chula)	A013	23 days	PCR		Amniotic Fluid 20 ml or EDTA cord blood 2 ml	2-8 °C	3,125	Out Lab	
Prenatal diagnosis for Beta-thalassemia (Mother)(Chula)	A012	23 days	PCR		EDTA whole Blood 5 ml	2-8 °C	3,125	Out Lab	
Pre-PND tests in couple at risk for Thalassemia (ATGenes)	M917	16 Days	Comprehensive molecular testings		6 mL EDTA blood	2-8 °C	4,800	Out Lab	
Pre-Pregnancy Planning Insight (Carrier status)(ThaiStemLife)	B106	42 Days		-	Buccal swab (in special test kit)	Room Temp.	26,750	Out Lab	
Presepsin	N345	1 days	Chemi Luminescent Enzyme Immuno Assay (CLEIA) by PATHFAST Instrument	< 300 pg/ml Exclusion of sepsis	EDTA blood 3 ml	2-8 °C	1,800	In Lab	
Primary Torsion Dystonia (PTD) genetics study (Siriraj)	B317	30 days	polymerase chain reaction (PCR) and direct DNA sequencing		EDTA whole blood 6-10 ml	2-8 °C	1,330	Out Lab	
Procalcitonin	P880	1 day	Chemiluminescent microparticle immunoassay (CMIA)	F 0.00-0.05 ng/ml M 0.00-0.08 ng/ml	serum 1 ml	2-8°C	1,350	In Lab	
Progesterone (BGH)	N242	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	250	In Lab	/
Pro-Graft Level	L340	1 day	FPIA		EDTA blood 2 ml	2-8°C	1,500	In Lab	
ProGRP (Progastrin-releasing peptide)	N508	1 day	Electrochemiluminescence immunoassay (ECLIA)	The cut off value based on a 95% specificity for lung cancer differential diagnosis : ≤ 85.7 pg/ml Non small cell lung cancer > 85.7 pg/ml Small cell lung cancer	Serum 1 ml	Sample : Up to 72 hrs at 2 - 8 C , 9 hrs at 20 C , 12 weeks at - 20 C	1,500	In Lab	
Prolactin (BGH)	N330	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	400	In Lab	/
Prolaris(Atlanta)	MM762	1 month	Quantitative real-time PCR (qPCR)		Formalin-fixed paraffin-embedded (FFPE) tumor block(s) with pathology report	Room Temperature	151,750	Out Lab	
Prostate Cancer Gene 3 (PCA3) (TDL,UK)	M734	14 Days	Target Capture, Transcription-Mediated Amplification (TMA), and Hybrid Protection Assay (HPA)		Urine 4 ml. in special kit	Ambient temperature, stability 5 days	26,710	Out Lab	
Prostate Health Index (PHI)(Mayo)	N405	10 days	Immunoenzymatic Assay		Serum 1 mL	Frozen (Stability 150 days)	11,120	Out Lab	
Prostatic Specific Antigen (PSA)	N050	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	400	In Lab	/
Prostatic Specific Antigen Free (Free PSA)	N060	1 day	Chemiluminescent microparticle immunoassay (CMIA)	F/M 0.01-999.00 0.50g/mL	serum 1 ml	2-8 °C	670	In Lab	/
Protein (24 Hrs Urine)	C470	1 day	Turbidimetric method		24 hrs Urine (No Preservative)	2-8 °C	150	In Lab	/
Protein (CSF)	C664	1 day	Turbidimetric method		CSF 1 ml	2-8 °C	150	In Lab	
Protein (CSF/Fluid)	C715	1 day	Turbidimetric method	Protein CSF 15-45 mg/dl	Body fluid 2 ml	2-8 °C	150	In Lab	
Protein (Random Urine)	C414	1 day	Turbidimetric method	0.0 - 12.0 mg/dl	Random urine 5 ml	2-8 °C	150	In Lab	/
Protein C	K270	5 days	Chromogenic assay	80.10 - 169.90 %	Na Citrate plasma 1 ml	Freeze	1,400	In Lab	/
Protein C Deficiency (sequence analysis of PROC gene)(CGC genetics)	M671	67 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	34,300	Out Lab	
Protein C gene mutation (Siriraj)	MM791	2 months	PCR		EDTA whole blood 5-10 ml	2-8 °C	7,000	Out Lab	
Protein Electrophoresis	T780	5 days	ELP	No monoclonal was detected	serum 1 ml	2-8 °C	820	In Lab	
Protein S	K280	5 days	Clotting assay	Male : 80.5-136.5 % Female : 62.8-139.6 %	Na Citrate plasma 1 ml	Freeze	1,400	In Lab	/
Protein S Deficiency (sequence analysis of PROS1 gene)(CGC genetics)	M670	67 Days	NGS		EDTA whole blood 3 ml	Room temp. (20-25 °C)	55,400	Out Lab	
Protein Zone Electrophoresis(Siriraj)	T783	7 days	zone electrophoresis		serum 2 ml (minimum 1 ml)	Frozen	850	Out Lab	
Protein/Creatinine Ratio (Urine)	C475	1 day	Protein : Turbidimetric method. Creatinine : Enzymatic method	Urine Protein : 0 - 14 mg/gL Urine Creatinine : ไม่นิย	Random urine 5 ml	2-8 °C	300	In Lab	/
Prothrombin Time	K050	1 day	Automated Blood Coagulation Analyzer; Symex CS-2500		Na Citrate plasma 1 ml	Freeze	200	In Lab	/
Proviral HIV PCR (DNA) [BML]	M445	3 days	Real-time PCR (Taqman Probe) for HIV-1 Provirus LTR region		EDTA Whole Blood 3-5 mL (ห้ามล้างนม) , Sperm wash ≥ 0.5 mL	2-8°C	2,000	In Lab	
PSEN1 gene mutations for Alzheimer's disease [BML]	M211	2 months	PCR and direct sequencing of PSEN1 gene (Exon 5,6,7,8 and 12)		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	28,000	In Lab	
PSEN1 gene mutations for Alzheimer's disease [BML] (STAT)	M212	1 month	PCR and direct sequencing of PSEN1 gene (Exon 5,6,7,8 and 12)		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	37,000	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
PSEN2 gene mutations for Alzheimer's disease [BML]	M213	2 months	PCR and direct sequencing of PSEN2 gene (Exon 4,5,6,7,9,11 and 12)		Peripheral Blood (EDTA tube) 3-5 ml	Room temp. (20-25 oc), 2-8oC 1 month	28,500	Out Lab	
PSEN2 gene mutations for Alzheimer's disease [BML] (STAT)	M214	1 month	PCR and direct sequencing of PSEN2 gene (Exon 4,5,6,7,9,11 and 12)		EDTA whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	38,000	In Lab	
PT Mixing Test	K300	1 day	Automated Blood Coagulation Analyzer; Symex CS-2500		Na Citrate plasma 1 ml	Freeze	800	In Lab	
PT Mixing test (Siriraj)	K301	5 days	automated coagulyzer CA500 series		Na citrate plasma 1 ml	Freeze	1,060	Out Lab	
PTEN-related syndrome (PTEN Sequencing)(LMGG)	MM767	30 days	PCR and Sequencing		EDTA blood 6 ml.	2-8 °C	17,600	Out Lab	
PTT Mixing Test	K310	1 day	Automated Blood Coagulation Analyzer; Symex CS-2500		Na Citrate plasma 1 ml	Freeze	800	In Lab	
PTT Mixing test (Siriraj)	K311	5 days	automated coagulyzer CA500 series		Na citrate plasma 1 ml	Freeze	1,070	Out Lab	
Pyrosequencing (Chula GenePro)	M753	18 days	PCR		Tissue in paraffin block + H&E slide + Pathology report	room temp	2,800	Out Lab	
Pyrosequencing for SNP (Rama)	B357	11 days	Pyrosequencing	-	EDTA whole blood 5 ml (minimum 3 ml) or urine or CSF or body fluid 1 ml (minimum 500 ul)	2-8 °C	3,000	Out Lab	
Pyruvate kinase(PK)(Siriraj)	C700	11 days	Kinetic assay		EDTA whole blood 3 ml	2-8 oC , stability 24 hours	2,200	Out Lab	
Pythium insidiosum antibody (Chula)	N972	30 days	ELISA		Clotted blood(whole blood) 3 ml or serum 2 ml	2-8 °C	620	Out Lab	
Pythium insidiosum antibody (Siriraj)	N875	20 days	immunodiffusion		serum 1 ml (minimum volume 500 ul)	2-8 °C	450	Out Lab	
QF-PCR & Karyotype (Combo)(BCC)	M765	step 1 PCR = 3 days , step 2 karyotype = 16 days (นับจากวันแรกที่นำส่งตัวอย่าง)			1. amniotic fluid 20 ml or 2. EDTA cord blood 1 ml + Heparine cord blood 3-5 ml 3. EDTA blood 1 ml + Heparin blood 3-5 ml	room temp or 2-8 °C or 37 °C	5,750	Out Lab	
QF-PCR (BCC)	M774	3 days	Quantitative Fluorescence - Polymerase Chain Reaction (QF-PCR)		1.Aminiotic fluid 3 ml (minimum 1 ml) Or 2.Umbilical cord blood in tube EDTA(PCR)	room temp or 2-8 °C or 37°C	3,000	Out Lab	
Quadruple marker test (2nd trimester) [RAMA]	N162	12 days	TRACE, ELISA		serum 1 ml	2-8 °C	1,960	Out Lab	
Quadruple screening [BRIA]	N161	12 days	EIA	-	serum 2 ml	2-8 °C	3,750	Out Lab	
Quadruple test	N163	10 days	TRACE Technology (Time - Resolved Amplified Crypt	Screening negative	serum 2 ml	2-8oC	2,050	In Lab	/
Qualifi (NGG)	MM760	9 days	Next generation sequencing based-on Illumina's Verifi		7- 10 mLWhole Blood in Streck™ BCT tube (Mix by gentle inversion 8-10 times and Storage at room temperature)	Room temperature	17,500	Out Lab	
Qualifi Premium (All Chromosomes) (NGG)	MM040	9 days	Next generation sequencing		7- 10 mLWhole Blood in Streck™ BCT tube (Storage at room temperature)	Room temperature	18,900	Out Lab	
Quantiferon TB Collection tubes	U009				-	-	1,500	In Lab	
Quantiferon TB Test	E258	3 days	Quantiferon-TB Gold PLUS ELISA assay (IGRA)		Blood in 4 specialized collection tubes (1 ml /tube)	Room temperature	2,000	In Lab	
Quantitative HBV DNA [BML]	M090	3 days	COBAS Ampliprep/COBAS TaqMan 48		EDTA plasma or serum 2 mL	2-8°C (Separate plasma within 24 hours of collection)	3,500	In Lab	/
Quantitative HCV RNA [BML]	M100	6 days	COBAS Ampliprep/COBAS TaqMan 48		EDTA plasma or serum 2 mL	2-8°C (Separate plasma within 24 hours of collection)	4,500	In Lab	/
Rabies antibody (NIH)	P761	23 days	RFFIT (Rapid fluorescence focus inhibiton test)		serum 2 ml	2-8 °C (stability 7 days)	3,500	Out Lab	
Rabies Antibody (Queen Saovabha Memorial Institute)	P201	18 days	Rabies Antibody Titer with the Virus Neutralization Test (RFFIT=Rapid fluorescence focus inhibiton test)		serum 1-2 ml	2-8 °C	5,750	Out Lab	
Rabies RNA Qualitative (Chula)	H100	11 days	NASBA (Nucleic Acid Sequence Based Amplification)	-	CSF or urine or saliva 1 ml or brain tissue or root hair (More than 20 pieces) ** The most proper sample is saliva	2-8 °C	1,730	Out Lab	
Rb-1 Gene (FISH)(RAMA)	B247	5 days	FISH	-	Heparinized blood or bone marrow 3-5 ml	2-8 °C	3,910	Out Lab	
RBC membrane screening (EMA)(Siriraj)	A634	11 days	Kinetic method		EDTA whole blood 3 ml	2-8 °C , stability 24 hours	1,400	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Regulatory T cell count (CD4+/CD25+)(Wincell)	T851	7 days	Flow cytometry	5 – 10% of CD4 cells	EDTA Blood 3 mL.	Storage 4 oC (Need to ship immediately because of stability 6 hours)	7,490	Out Lab	
Renin, direct	C784	7 days	Instrument by LIAISON Analyser	Upright posture 4.4 - 46.1 uIU/mL Supine posture 2.8 - 39.9 uIU/mL	EDTA plasma 1 ml	Frozen	1,800	In Lab	
Reptilase Time(Bathroxobin)(Chula)	K375	5 days	thrombin time based assay		Na citrate plasma 2 ml	Frozen	1,330	Out Lab	
Resistance to Methotrexate (SLC19A1 gene)(CGC genetics)	M666	37 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	13,480	Out Lab	
Respiratory 18 virus (RAMA)	H150	3 days	Real Time PCR (Abbott)		Recommended Sample in VTM ; Throat swab / Thracaea suction / Nasopharyngeal swab / Nasopharyngeal wash / Nasopharyngeal aspirate or Bronchoalveolar lavage, sputum in sterile container	2-8 °C	4,030	Out Lab	
Respiratory 33 Pathogen Panel (Rama)	MA025	3 Days	Real Time PCR		Recommended Sample in VTM ; Throat swab / Thracaea suction / Nasopharyngeal swab / Nasopharyngeal wash / Nasopharyngeal aspirate	2-8 °C	6,720	Out Lab	
Respiratory Bacteria and Virus Panel	M447	3 days	Multiplex Real-time PCR detect for 7 respiratory bacteria and 20 respiratory virus panel		Nasopharyngeal aspirate/Nasal wash/Sputum/BAL 1 mL Nasal swab/Nasopharyngeal swab/Throat swab (Swab must be sterile Dacron, nylon, or rayon with plastic shafts)	2-8°C	8,200	In Lab	/
Respiratory bacteria panel	M446	3 days	Multiplex Real-time PCR detect 7 assigned bacteria		Nasopharyngeal aspirate/Nasal wash/Sputum/BAL 1 mL Nasal swab/Nasopharyngeal swab/Throat swab (Swab must be sterile Dacron, nylon, or rayon with plastic shafts)	2-8°C	3,750	In Lab	/
Respiratory Panel Film Array(Rama)	MA024	1 days	Film Array		Recommended Sample in VTM ; Nasopharyngeal swab In case of other specimen please consult Rama before sent sample.	2-8 °C	9,240	Out Lab	
Respiratory Panel plus SARS-CoV-2 (RP22 plus COVID-19) [BML]	M082	Report within 4 hours after receive specimen	Automatic Multiplex Real-time PCR		Nasopharyngeal swab AND Throat swab in VTM/UTM	2-8 °C for 48 hours	5,700	In Lab	
Respiratory Pathogen Panel (RP22) (STAT) [BML]	M081	Report within 4 hours after receive specimen	RT-Nested Real-time PCR		Nasopharyngeal swab in UTM (Preferred), Nasopharyngeal aspirate	2-8 °C for 72 hours	7,380	In Lab	
Respiratory Pathogen Panel 33 (Chula)	MA026	5 Days	Real-time RT-PCR		Nasopharyngeal swab in UTM/VTM or Throat swab in UTM/VTM or Sputum in sterile container	2-8 °C	7,000	Out Lab	
Respiratory Pathogen Panel 33 (RP33)	M439	2 Days	Multiplex Real-time PCR detect 33 assigned pathogens		Throat swab, Nasopharyngeal swab, Nasal swab in sterile container Nasal wash, Nasopharyngeal wash, Nasopharyngeal aspirate, Sputum, BAL in sterile container Swab in 1-2 mL viral transport media (VTM) is acceptable. (Swab สามารถใส่ใน VTM ได้)	2-8oC	6,200	In Lab	/
Respiratory Syncytial Isolation [NIH]	P732	30 Days	cell culture		Nasopharyngeal Aspirate (or swab) , throat swab , sputum (all of these preserved in Flu VTM) , CSF (no preservative)	2-8 °C	1,800	Out Lab	
Respiratory Syncytial Virus IgG (RSV IgG)(Rama)	N302	11 days	ELISA		serum 1 ml	2-8 °C	640	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Respiratory Syncytial Virus IgM (RSV IgM)(Rama)	N301	11 days	ELISA		serum 1 ml	2-8 °C	640	Out Lab	
Respiratory Syncytial Virus PCR (Type A)(RAMA)	MM771	3 days	PCR		Nasopharyngeal was/aspirate /Bronchoalveolar lavage in sterile container or Throat swab in VTM	2-8 °C	2,360	Out Lab	
Respiratory Syncytial Virus PCR (Type B)(RAMA)	MM772	3 days	PCR		Nasopharyngeal was/aspirate /Bronchoalveolar lavage in sterile container or Throat swab in VTM	2-8 °C	2,360	Out Lab	
Respiratory Virus Ag(Panel 7 types)(Chula)	H164	4 days	Immunochromatography(IM) + Direct Immunofluorescence Assay		Nasopharyngeal aspirate/swab in media for Respiratory virus(Chula), Throat swab in media for Respiratory virus(Chula), Bronchaiveolar larvage in media for Respiratory virus(Chula) or Tracheal aspirate in media for Respiratory virus(Chula)	2-8 °C (stability 2 days)	3,000	Out Lab	
Respiratory Virus Group Realtime PCR (22 Panel) [Siriraj]	H194	5 days	Real time PCR		Nasopharyngeal wash in VTM,Nasopharyngeal swab in VTM,Throat swab in VTM,Sputum in VTM	2-8 °C	5,000	Out Lab	
Respiratory Virus Isolation (NIH)	H015	1 month	cell culture / if positive , identified by IFA		Nasopharyngeal Aspirate (or swab) , throat swab , sputum (all of these preserved in Flu VTM)	2-8 °C	1,730	Out Lab	
Respiratory Virus Isolation Include PCR [NIH]	P015	3 days	RT PCR		Nasopharyngeal aspirate (in VTM) or throat swab (in Flu VTM)	2-8 °C	4,030	Out Lab	
Respiratory virus Panel-Multiplex PCR	M444	3 days	Multiplex Real-time PCR detect 21 assigned virus		Nasopharyngeal aspirate/Nasal wash/Sputum/BAL 1 mL Nasal swab/Nasopharyngeal swab/Throat swab (Swab must be sterile Dacron, nylon, or rayon with plastic shafts)	2-8°C	4,850	In Lab	/
Respiratory Virus Screening(Siriraj)	H020	7 days	IFA		nasopharyngeal aspirate/wash,tracheal suction,sputum in VTM or BAL in sterile container	2-8 °C	4,500	Out Lab	
RET gene in multiple endocrine neoplasia type 2(MEN2A,MEN2B)[not Rett syndrome][Siriraj SIMR]	B185	1 months	polymerase chain reaction (PCR) only exons 10, 11, 13, 14, 15 and16 ; Than follow by direct DNA sequencing	-	EDTA whole blood 5 ml	2-8 °C	5,750	Out Lab	
Reticulocyte Count	A120	1 day	Flow cytometry Method	0.2-1.8 %	EDTA Blood 2 ml	2-8oC ควรทำการตรวจภายใน 4 ชั่วโมงหลังการเจาะ	100	In Lab	
Rett Syndrome (deletions/duplication analysis on MECP2 gene)(CGC genetics)	M665	37 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	25,000	Out Lab	
Rett syndrome (MECP2 Sequencing)(LMGG)	MM768	30 days	PCR and Sequencing		EDTA blood 6 ml.	2-8 °C	8,750	Out Lab	
Rett Syndrome (sequence and deletion/duplication analysis of MECP2 gene)(CGC genetics)	M663	67 days	Sanger + MLPA		EDTA whole blood 3 ml	Room temp. (20-25 °C)	42,000	Out Lab	
Reverse T3 (rT3)(Quest,USA)	N039	30 Days	LC/MS		serum 2 ml	Frozen	19,700	Out Lab	
Rh Group for Haematology	A025	1 day	Tube Method		EDTA Blood or Clotted blood	ควรทำการทดสอบทันทีหลังจากการ collect ได้แต่ถ้าจำเป็นต้องล่าช้าในการทดสอบควรเก็บ Sample ไว้ที่ 2-8°C และทำการทดสอบภายใน 48 ชม.	60	In Lab	
Rheumatoid Factor	P280	1 day	Latex agglutination		serum 1 ml	2-8 °C	200	In Lab	
Rheumatoid Factor (Quantitative)	P882	1 day	Immunoturbidimetric	Normal < 30 IU/mL	serum 1 ml	2-8 °C 2days	450	In Lab	
Rickettsia antibody (AFRIMS)	P712	5 days	IFA	N/A	serum or CSF 1 ml (minimum 500 ul)	2-8 °C	1,125	Out Lab	
Rickettsia spot fever group PCR [BML]	M129	3 days	Extract DNA from clinical specimen and amplify with Rickettsia spp. reaction mix.		EDTA Whole blood 2 mL	2-8°C	1,700	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Risperidone (RAMA)	V691	11 days	HPLC	N/A	EDTA whole blood 6 mL or EDTA plasma 2 mL [Centifuge 1500 rpm 15 minute](Shoul be sent to subcontract within 6 hrs after blood collecting)	EDTA Whole blood 2-8 °C 6 Hr, Plasma -20 °C 48 Hr.	1,330	Out Lab	
Ristocetin Cofactor(RiCof)[Siriraj]	A631	11 days	ELISA	N/A	Citrate plasma 1 ml	Freeze	750	Out Lab	
Rivaroxaban level (Chula)	V719	5 days	chromogenic assay		Citrate plasma 2 ml in plastic tube	Frozen	1,625	Out Lab	
Rota / Adeno Antigens (Rapid test)	D391	1 day	Immunochromatography technique		stool 2 ml or 2 gram	2-8 °C stability 72 hrs	320	In Lab	
Rota Virus genotype [Chula]	MM527	7 days	Sequencing		Stool 1-2 ml or 1-2 gm in sterilized container	2-8 °C	3,940	Out Lab	
Rota Virus PCR (With type) [Chula]	H203	14 Days	PCR + Sequencing		Stool 1-2 ml or 1-2 gm in sterilized container	2-8 °C	6,250	Out Lab	
Rota Virus PCR [Chula]	MM526	7 days	RT-PCR		Stool 1-2 ml or 1-2 gm in sterilized container	2-8 °C	2,500	Out Lab	
Rotavirus Genotyping (VP4/VP7) [BML]	M269	10 วัน	Genotyping Step : RT-PCR and direct sequencing of VP7/VP4 protein gene (G/P)		Stool in sterile container (Rotavirus must be POSITIVE จากแล็บ BML เท่านั้น)	2-8 °C	3,470	In Lab	
Rotavirus RT-PCR [BML]	M259	3 days	Real-time PCR (Taqman probe) for Rotavirus NSP3 gene		Stool in sterile container (ไม่รับ rectal swab)	2-8 °C	2,600	In Lab	
Rotavirus screening	D390	1 day	Immunochromatographic assay		Stool (Sterile container)	2-8 °C	250	In Lab	
RSV Antigen screening	P850	1 day	immunochromatography		Nasopharyngeal Aspirate	2-8°C	500	In Lab	/
RSV Antigen screening (Fluorescence immunoassay)	P851	1 day	Fluorescence immunoassay technology used with Sofia analyzer	Negative	Nasopharyngeal swab (use swab in the kit), Nasopharyngeal wash or aspirate	2-8 °C	700	In Lab	
RSV Antigen(IFA)[Siriraj]	H045	7 days	IFA		nasopharyngeal aspirate/wash in VTM ,trachealsuction in VTM ,sputum in VTM media,BAL in sterile container	2-8 °C	800	Out Lab	
RT-PCR for Ewing's Sarcoma (EWSR1/FLI1 and EWSR1/ERG) (RAMA)	MM083	14 days	RT-PCR		Tumor in paraffin block with H&E slide and primary pathology report	Room temperature	6,450	Out Lab	
RT-PCR for Myxoid / Round cell Liposarcoma (FUS/DDIT3 and EWSR1/DDIT3) (Rama)	MM570	14 days	RT-PCR		Tumor in paraffin block with H&E slide and primary pathology report	Room temperature	6,450	Out Lab	
RT-PCR for t(X;18) Synovial sarcoma (Rama)	M968	12 Days	Using reverse transcriptase polymerase chain reaction (RT-PCR), involving fusion of the SYT (Synonyms: SS18-synovial sarcoma translocation, chromosome 18) gene on chromosome 18 to either the SSX1 (synovial sarcoma, X breakpoint 1) or the SSX2 (synovial sarcoma, X breakpoint 2) gene on chromosome.		Tumor in paraffin block with H&E slide and primary pathology report	Room temp	5,500	Out Lab	
Rubella IgG	N665	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	250	In Lab	/
Rubella IgM	N670	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	400	In Lab	/
Rubella IgM IFA titer (BPL)	N671	3 days	Immunofluorescence	Serum = Negative (<1:10)	Serum1-2ml	2-8 °C	1,250	Out Lab	
Rubella IgM IFA titer (CSF)(BPL)	N676	3 days	Immunofluorescence	CSF = Negative (1:4)	CSF1-2 ml	2-8 °C	1,250	Out Lab	
RYR1 Gene Mutation [Siriraj]	B156	42 Days	DNA Analysis		EDTA whole blood 6 - 10 ml	2-8 °C	6,250	Out Lab	
Saccharomyces cerevisiae antibody(ASCA)	P885	16 days	indirect immunofluorescence		serum 2 ml (minimum 300 ul)	2-8 °C	4,800	Out Lab	
Salicylate(Screening in Gastric)[Siriraj]	V866	5 days	color test	N/A	Gastric contents 20 ml	2-8 °C	800	Out Lab	
Salicylate[Rama]	V290	7 days	Spectrophotometry		serum 1 ml	2-8 °C	620	Out Lab	
Salmonella serovar	E465	30 Days	biochemistry test and serotype by agglutination		Salmonella Colony on blood agar	room temp	410	Out Lab	
Salmonella typhi IgM/IgG (rapid test)	P841	1 day	Immunochromatography		serum 1 ml	2-8 °C	550	In Lab	
SARS-CoV-2 Real-time RT-PCR (COVID-19) (NHSO-HQ) [BML]	M837	7 Hrs	1. Detect at least two genes (Either N, E, orf1ab, RdRp or 5'NCR) 2. Confirm with another reagent if specimen reveals positive result.		1. Nasopharyngeal+Throat swab in VTM/UTM with Lysis Solution OR 2. Nasopharyngeal+Throat swab in eNAT tube	Ambient temperature 24 hours 2-8°C 48 hour	3,000	In Lab	
SARS-CoV-2 Real-time RT-PCR (COVID-19) (NHSO-NHH) [BML]	M839	4 Hrs	1. Detect at least two genes (N and orf1ab) 2. Confirm with another reagent if specimen reveals positive result.		1. Nasopharyngeal+Throat swab in VTM/UTM with Lysis Solution OR 2. Nasopharyngeal+Throat swab in eNAT tube	Ambient temperature 24 hours 2-8°C 48 hour	3,000	In Lab	
SARS-CoV-2 Real-time RT-PCR (COVID-19) (NHSO-RYG) [BML]	M838	6 Hrs	1. Detect at least two genes (N and orf1ab) 2. Confirm with another reagent if specimen reveals positive result.		1. Nasopharyngeal+Throat swab in VTM/UTM with Lysis Solution OR 2. Nasopharyngeal+Throat swab in eNAT tube	Ambient temperature 24 hours 2-8°C 48 hour	3,000	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
SARS-CoV-2 Real-time RT-PCR (COVID-19) [BML]	M438	7 Hrs	1. Detect at least two genes (Either N, E, orf1ab, RdRp or 5'NCR) 2. Confirm with another reagent if specimen reveals positive result.		1. Nasopharyngeal+Throat swab in VTM/UTM with Lysis Solution OR 2. Nasopharyngeal+Throat swab in eNAT tube	Ambient temperature 24 hours 2-8oC 48 hour	2,400	In Lab	
SCA type 1,2,3 (Spinocerebellar ataxia) (Rama)	B420	20 Days	PCR		EDTA whole blood 6 ml (minimum 3 ml)	2-8 °C	8,810	Out Lab	
SCA type 1,2,3 (spinocerebellar ataxia)(Siriraj)	B140	60 days	polymerase chain reaction (PCR)		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	4,200	Out Lab	
SCA type 1,2,3,6,7 (Spinocerebellar ataxia)(RAMA)	B141	20 Days	PCR		EDTA whole blood 6 ml (minimum 3 ml)	2-8 °C	6,000	Out Lab	
SCA type 6 (Spinocerebellar ataxia) (RAMA)	M994	30 Days	PCR		EDTA whole blood 6 ml (minimum 3 ml)	2-8 °C	3,000	Out Lab	
SCA type 6,7,12 (spinocerebellar ataxia)(Siriraj)	MM642	60 days	polymerase chain reaction (PCR)		EDTA whole blood 10 ml (minimum 6 ml)	2-8 °C	4,965	Out Lab	
SCA type 7 (Spinocerebellar ataxia) (RAMA)	M995	30 Days	PCR		EDTA whole blood 6 ml (minimum 3 ml)	2-8 °C	3,000	Out Lab	
Schistosomal antibody (Tropmed)	P714	11 days	COPT (circum ovum precipitation test)		serum 1 ml (CSF is not available)	2-8oC, stability 2 months	1,000	Out Lab	
Schwartz-Jampel syndrome (Deletion/Duplication)(Centogene,Germany)	B061	29 days	gene sequencing (Deletion/Duplication)		2 mL EDTA blood	room temp	73,710	Out Lab	
Schwartz-Jampel syndrome (Full gene sequencing)(Centogene,Germany)	B062	22 days	gene sequencing (Full gene sequencing)		2 mL EDTA blood	room temp	210,330	Out Lab	
Sclerosis profile	T062	1 day	Immunoblot	Negative	serum 1 ml	2-8 °C	3,500	In Lab	
Sclerosis profile [Siriraj]	T063	19 days	Immunoblot	Negative	serum 1 ml	2-8 °C	4,100	Out Lab	
Screening for common drug(Blood)[Rama]	V456	14 days	Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)		Serum 2 ml (DO NOT USE GEL TUBES) Or NaF (Clot blood without seperate serum is not recommended)	2-8 °C	4,000	Out Lab	
Screening for common drug(Gastric/Drugs)[Rama]	V459	20 days	GC-MS		Gastric Washing 20 ml or drugs	2-8 °C	2,530	Out Lab	
Screening for common drug(Urine) [Rama]	V458	17 days	Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)		random urine 50 ml (minimum 3 ml)	2-8 °C	4,000	Out Lab	
Screening for Steroids Drug (Siriraj)	V464	9 days	GC/MS		Traditional and modern drugs : Powders 3-5 gm, Tablets 5 tablets, watery drugs 10 mL.	Room temp	1,500	Out Lab	
Scrub Typhus Antibody(Rapid Test)	P842	1 day	Immunochromatography		serum 1 ml	2-8 °C	500	In Lab	
Selenium (Blood)[Siriraj]	V250	16 days	Graphite Furnance Atomic Absorbtion Spectro photometry ; GFAAS	Non exposed 46-143 ug/L	Clotted blood 5 ml (in case of do not separated) Or Serum1- 2 ml.	2-8 °C	500	Out Lab	
Selenium in Blood (ICP-MS)	S038	within 5 days ** Checkup group maybe longer**	ICP-MS	79.00 - 141.00 ug/L	EDTA plasma 1 mL	Store at 2-8 °C	500	In Lab	/
Selenium in Urine (ICP-MS)	S300	within 7 days (except check up group maybe longer)	ICP-MS	10.50 - 45.50 ug/L Forensic Science International 153(2005)39-44.	Random Urine 5-10 mL .	Store at 2-8 °C	480	In Lab	/
Sequencing whole Alpha-globin genes (ATGenes)	M920	23 Days	Direct whole gene sequence		3-6 mL EDTA blood	2-8 °C	20,300	Out Lab	
Sequencing whole β-globin genes (ATGenes)	M921	17 Days	Direct whole gene sequence		3-6 mL EDTA blood	2-8 °C	10,300	Out Lab	
Sequencing with Dye 5 Rxn[Siriraj]	B395	2 months	PCR		EDTA whole blood 6-10 ml	2-8 °C	2,880	Out Lab	
Serotonin(Mayo)	P865	15 days	Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)	< or =230 ng/mL	serum 2 ml (Min Vol. 1.1 mL)	Freeze : stability 90 days	10,200	Out Lab	
Serum Bactericidal Titre[Rama]	E260	5 days	susceptibility test	-	(1) clotted blood (before take antibiotics) sterile 5-10 ml , Don't separate (2) clotted blood (after take antibiotics) sterile 5-10 ml , Don't separate (3) fresh purified colony 1 plate	(clotted blood 2-8 oC) (colony 37 o C)	1,100	Out Lab	
Serum Iron	N100	1 day	Ferene	F001-99950-1700g/dL M001-99905-1750g/dL	serum 1 ml	2-8 °C	200	In Lab	/
Sex Hormone Binding Globulin	N315	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	600	In Lab	/
Silver in Blood (ICP-MS) (Rama)	V898	16 days (except check up group maybe longer)	ICP-MS		EDTA Whole Blood 2 mL**	Store at 2-8 °C	675	Out Lab	
Sirolimus (Rapamune,Rapamycin)[Rama]	N701	3 days	MEIA (microparticle enzyme immunoassay)		EDTA whole blood 3 ml	2-8 °C	1,400	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Sirolimus(Siriraj)	V129	2 days	CMIA [Chemiluminescence Microparticle Immunoassay]		EDTA whole blood 3-5 ml	2-8 °C	2,600	Out Lab	
Skeletal dysplasia (NGS panel for 31 genes)(CGC genetics)	MM748	67 Days	multiplex mutation test		1. EDTA whole blood 3 ml 2. Extracted DNA 100 ul (concentration 50 ng/mL) 3. Amniotic Fluid in sterile tubes (1 mL per pregnancy week)4. CVS (10-30 mg CVS collected in medium with EDTA+PES+antibiotics)	Room temp. (20-25 °C)	147,960	Out Lab	
Skeletal dysplasia (NGS panel for 6 genes)(CGC genetics)	MM747	37 Days	NGS		1. EDTA whole blood 3 ml 2. Extracted DNA 100 ul (concentration 50 ng/mL) 3. Amniotic Fluid in sterile tubes (1 mL per pregnancy week)4. CVS (10-30 mg CVS collected in medium with EDTA+PES+antibiotics)	Room temp. (20-25 °C)	78,100	Out Lab	
SkinFit(ThaiStemLife)	MM796	8 weeks	SNP based sequencing		2 tubes of Buccal Swab(In special test kit)	Room Temperature	26,550	Out Lab	
Sleep Profile (Saliva) [ADL]	N796	23 days			saliva 5 ml in collecting kit (1 tube)	2-8 °C (stability 7 days), do not freeze	4,200	Out Lab	
SMA carrier screening by real-time PCR and Fragile-X Syndrome and Cystic Fibrosis 139 (LMGG)	MM078	5 weeks	Real-time PCR (SMA) and Fragment analysis (Fragile X syndrome) and Cystic fibrosis 139 mutation by NGS	x	EDTA whole blood 3 ml (3 tubes)	2-8 °C Send to LMGG with in 48 Hr	42,700	Out Lab	
SMA carrier screening by real-time PCR and Fragile-X Syndrome(LMGG)	MM777	16 days	Real-time PCR (SMA) and Fragment analysis (Fragile X syndrome)		EDTA whole blood 6 ml (2 tubes)	2-8 °C Send to LMGG with in 48 Hr	12,950	Out Lab	
SMA carrier screening by real-time PCR(LMGG)	MM960	9 days	Real-time PCR detects autosomal recessive mutation of SMN1 gene		EDTA blood 3 ml	2-8 °C	4,625	Out Lab	
Sodium	C500	1 day	Indirect ISE		serum 1 ml	2-8 °C	65	In Lab	/
Sodium (24 Hrs Urine)	C441	1 day	Indirect ISE		24 hrs-urine (No preservative)	2-8 °C	65	In Lab	/
Sodium (Random Urine)	C440	1 day	Ion-Selective electrode diluted (Indirect)		Random urine 5 ml	2-8 °C	65	In Lab	/
Soy milk precipitin [Siriraj]	A860	11 days	double immunodiffusion		serum 1 ml	2-8 °C	930	Out Lab	
Specific Gravity	D010	1 day	เครื่องตรวจวัดแถบทดสอบปัสสาวะแบบกึ่งปริมาณอัตโนมัติ UF-5000		urine or fluid	2-8oC	45	In Lab	
Specific IgE (ImmunoCap) for Asthma/Rhinitis (Food allergens)	J116	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	4,000	In Lab	/
Specific IgE (ImmunoCap) for Asthma/Rhinitis (Respiratory allergens)	J117	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	5,000	In Lab	/
Specific IgE (ImmunoCap) for CRD (8 allergens)	J133	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	5,000	In Lab	/
Specific IgE (ImmunoCap) for Eczema symptoms	J113	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	6,000	In Lab	/
Specific IgE (ImmunoCap) for Food 2	J135	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	3,500	In Lab	/
Specific IgE (ImmunoCap) for Food Mixes	J134	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	5,500	In Lab	/
Specific IgE (ImmunoCap) for Venom	J129	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	6,000	In Lab	/
Specific IgE (ImmunoCap) for Wheat and Omega-5 Gliadin	J338	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	1,150	In Lab	/
Specific IgE (ImmunoCap) for Wheeze/Rhinitis (Food allergens)	J114	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	3,000	In Lab	/
Specific IgE (ImmunoCap) for Wheeze/Rhinitis (Respiratory allergens)	J115	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	5,000	In Lab	/
Specific IgE (ImmunoCap)for Milk and Casein	J138	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	1,600	In Lab	/
Specific IgE for Acacia longifolia (t19)	J379	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	600	In Lab	/
Specific IgE for Alpha-lactalbumin (f76)	J011	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	740	In Lab	/
Specific IgE for Alternaria alternata (A.tenuis)(m6)	J265	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Aspergillus fumigatus (m3)	J270	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Banana (f92)	J092	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	900	In Lab	/
Specific IgE for Beef	J112	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	1,600	In Lab	/
Specific IgE for Beef (NUH Singapore)	J130	23 days	FPIA	as labtrak lay out	serum 1 ml	2-8 °C	2,280	Out Lab	
Specific IgE for Bermuda grass; Cynodon dactylon (g2), หญ้าแพรง	J255	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Beta-lactoglobulin (f77)	J012	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	740	In Lab	/
Specific IgE for Birch	J127	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 1 ml	2 - 8 C up to 1 week	800	In Lab	/
Specific IgE for Blue mussel; Mytilus edulis (f37), หอยแมลงภู่	J300	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Buckwheat; Fagopyrum esculentum (f11), ลูกเดือย	J271	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Careless weed (w82)	J380	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	670	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Specific IgE for Casein (f78)	J013	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	800	In Lab	/
Specific IgE for Cat epithelium and dander (e1), หมีและผิวหนังแมว	J030	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Celery	J396	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8oC up to 7 days	890	In Lab	/
Specific IgE for Chicken	J109	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 1 ml	2 - 8 C up to 1 week	800	In Lab	/
Specific IgE for Cladosporium herbarum (m2)	J211	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	850	In Lab	/
Specific IgE for Cockroach, American; Periplaneta americana (i206), แมลงสาบ (อเมริกัน)	J310	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	890	In Lab	/
Specific IgE for Cockroach, German; Blatella germaica (i6), แมลงสาบ (เยอรมัน)	J090	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	890	In Lab	/
Specific IgE for Common wasp (yellow jacket) [Rama]	J205	7 days	Fluorescence immunoassay	Clinical Interpretation : Class 0 <0.35 Absent or Undetectable Class 1 0.35-0.7 Low Class 2 0.71-3.5 Moderate Class 3 3.51-17.5 High Class 4 17.51-50.00 Very High Class 5 50.01-100 Very High Class 6 >100 Very High	serum 1 ml	2-8 °C	1,150	Out Lab	
Specific IgE for Cow s Whey (f236)	J051	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	1,050	In Lab	/
Specific IgE for Cow's milk (f2), นมวัว	J050	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Crab; Cancer pagurus (f23), ปูทะเล	J280	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Dog Dander (e5), หมีสุนัข	J230	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Egg white(f1), ไข่ขาว	J040	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Egg yolk(f75), ไข่แดง	J305	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Fire Ant	J340	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8oC up to 7 days	1,040	In Lab	/
Specific IgE for fish	J160	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Food Allergen (Immunoblot)	J245	2 days	immunoblot	Class 0 , <0.35 kU/l	Serum / 1 ml (minimum 700 ul)	2-8 °C	2,000	In Lab	
Specific IgE for fx20 (Wheat, Rye, Barley, Rice)	J061	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L Negative	serum 1 ml	2 - 8 oC	1,400	In Lab	/
Specific IgE for fx73 (Pork, Beef, Chicken) [Siriraj]	J151	11 days	Fluorescence immunoassay	< 0.35 KUA/L	serum 1 ml	2-8 °C	1,865	Out Lab	
Specific IgE for Goose feathers, Chicken feathers, Duck feathers, Parrot feathers	J239	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	1,400	In Lab	/
Specific IgE for Guinea pig epithelium, Rabbit epithelium, Hamster epithelium, Rat, Mouse	J238	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	1,400	In Lab	/
Specific IgE for Honey bee	J201	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	800	In Lab	/
Specific IgE for Honey bee [RAMA]	J199	7 days	Fluorescence immunoassay	Clinical Interpretation : Class 0 <0.35 Absent or Undetectable Class 1 0.35-0.7 Low Class 2 0.71-3.5 Moderate Class 3 3.51-17.5 High Class 4 17.51-50.00 Very High Class 5 50.01-100 Very High Class 6 >100 Very High	serum 1 ml	2-8 °C	1,150	Out Lab	
Specific IgE for Inhalation Allergen (Immunoblot)	J240	2 days	immunoblot	Class 0 , <0.35 kU/l	Serum / 1 ml (minimum 700 ul)	2-8 °C	2,000	In Lab	
Specific IgE for Johnson grass; Sorghum halepense (g10), หญ้าหาง	J260	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Latex(k82)	J120	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	1,500	In Lab	/
Specific IgE for Linseed	J128	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C for 1 week	1,000	In Lab	/
Specific IgE for Mango (f91)	J091	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	900	In Lab	/
Specific IgE for Mixed epidermals and animal proteins (Cat dander, Dog dander, Guinea pig epithelium, Rat, Mouse)(ex2)	J381	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2 - 8 oC	1,055	In Lab	/
Specific IgE for Mixed food	J070	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L Negative	serum 1 ml	2-8 °C	750	In Lab	/
Specific IgE for Mixed gras	J080	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L Negative	serum 1 ml	2-8 °C	955	In Lab	/
Specific IgE for Mixed mold(mx2)	J100	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L Negative	serum 1 ml	2-8 °C	750	In Lab	/
Specific IgE for mixture of Respiratory Allergens (Rama)	J214	7 days	FEIA (Fluorescence Enzyme Immunoassay) : immunoCAP fluoroimmunoassay		serum 1 ml	2-8 °C	690	Out Lab	/
Specific IgE for Mosquito	J021	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	800	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Specific IgE for omega 5 gliadin	J015	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	1,200	In Lab	/
Specific IgE for Ovomucoid (f233)	J213	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	850	In Lab	
Specific IgE for Paper wasp	J206	7 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	Clinical Interpretation : Class 0 <0.35 Absent or Undetectable Class 1 0.35-0.7 Low Class 2 0.71-3.5 Moderate Class 3 3.51-17.5 High Class 4 17.51-50.00 Very High Class 5 50.01-100 Very High Class 6 >100 Very High	serum 1 ml	2-8 °C	1,150	Out Lab	
Specific IgE for Peanut; Arachis hypogaeae (f13), ถั่วลิสง	J200	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Pediatric Allergen (Immunoblot)	J108	2 days	immunoblot	Class 0 , <0.35 kU/l	Serum / 1 ml (minimum 700 ul)	2-8 °C 14 DAYS	2,250	In Lab	
Specific IgE for Penicilloyl G (c1)	J320	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	750	In Lab	/
Specific IgE for Phadiatop	J110	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L Negative	serum 1 ml	2-8 °C	750	In Lab	/
Specific IgE for Phadiatop infant (Food)	J111	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L Negative	serum 1 ml	2 - 8 oC up to 7 days	750	In Lab	/
Specific IgE for pork	J140	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2-8oC up to 7 days	1,400	In Lab	/
Specific IgE for Rice (f9)	J142	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 2 ml	2-8 °C	670	In Lab	/
Specific IgE for Salmon; Salmo salar (f41), ปลาแซลมอน	J295	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Sea Food	J330	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8oC up to 7 days	800	In Lab	/
Specific IgE for Sesame seed; Sesamum indicum (f10), เมล็ดงา	J275	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for shrimp; Pandalus borealis (f24), กุ้งแช่ (แถบ Pacific-Atlantic)	J220	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for soya bean; Glycine max (f14), ถั่วเหลือง	J170	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Squid; Loligo spp. (f258), ปลาหมึกกล้วย	J285	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	890	In Lab	/
Specific IgE for Tuna;Thunnus albacares (f40), ปลาทูน่า	J290	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for Wasp yellow jacket	J204	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	740	In Lab	/
Specific IgE for Wheat; Triticum aestivum(f4), ข้าวสาลี	J060	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE for White-face hornet	J203	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	800	In Lab	/
Specific IgE for Yeast (f45)	J212	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	850	In Lab	
Specific IgE for Yellow hornet	J202	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 kUA/l	serum 1 ml	2 - 8 oC up to 7 days	800	In Lab	/
Specific IgE House dust mite(d1); Dermatophagoides pteronyssinus, ไรฝุ่น	J010	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE House dust mite(d2); Dermatophagoides farinae, ไรฝุ่น	J020	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 1 ml	2-8 °C	600	In Lab	/
Specific IgE profile (Immunocap) for Arabian food	J102	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	2,940	In Lab	/
Specific IgE profile (Immunocap) for CRD	J103	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	4,200	In Lab	/
Specific IgE Profile (Immunocap) for Egg Component	J137	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	1,800	In Lab	/
Specific IgE profile (Immunocap) for Egg Component with Ovalbumin	J143	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	2,500	In Lab	/
Specific IgE profile (Immunocap) for Food	J101	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	2,930	In Lab	/
Specific IgE Profile (Immunocap) for Food (10 allergens)	J398	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	3,580	In Lab	/
Specific IgE Profile (Immunocap) for Food (7 allergens)(Vejthani)	J146	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	4,500	In Lab	/
Specific IgE Profile (Immunocap) for Food 6 allergens (add on from fx5 positive)	J161	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	3,100	In Lab	/
Specific IgE profile (Immunocap) for Inhalation 1	J105	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	4,150	In Lab	/
Specific IgE profile (Immunocap) for Inhalation 2	J106	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	4,800	In Lab	/
Specific IgE profile (Immunocap) for Inhalation 3 (10 allergens)	J397	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	4,875	In Lab	/
Specific IgE profile (Immunocap) for Milk Component	J144	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 2 ml	2-8 °C	2,900	In Lab	/
Specific IgE profile (Immunocap) for Nuts	J237	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	As attached file	Serum 2 ml	2 - 8 C up to 1 week	5,500	In Lab	/
Specific IgE Profile (Immunocap) for Peanut Component	J141	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	2,800	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Specific IgE Profile (Immunocap) for Respiratory (10 allergens)(Vejtani)	J147	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	5,500	In Lab	/
Specific IgE profile (Immunocap) for Seafood	J107	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2 - 8 C up to 1 week	3,040	In Lab	/
Specific IgE profile (Immunocap) for Soya bean Component	J145	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	serum 2 ml	2-8 °C	4,200	In Lab	/
Specific IgE profile(Immunocap) for Fruit and Vegetable	J104	3 days	Fluoroenzymeimmunoassay by Phadia 250 instrument	< 0.35 KUA/L	Serum 2 ml	2-8 °C	4,490	In Lab	/
Specific IgG for Egg white (Gf1) [Chula]	J041	3 months	Fluorescence immunoassay	-	serum 1 ml	2-8 °C	1,040	Out Lab	
Specimen Transportation Fee (Stat)	U101	N/A			X	X	800	Out Lab	
Spectrin mutation panels (alpha and beta spectrin)	MM595	20 days	PCR-RFLP and ARMS-PCR		EDTA whole blood 3 ml	2-8 °C	7,560	Out Lab	
S-Phenylmercapturic acid(S-PMA) (LC-MS/MS)	S318	within 9 days (Checkup group maybe longer)	LC-MS/MS	0.00 - 25.00 ug/g creatinine (ACGIH2020)	Random Urine 10-20 mL (End of shift)	Store at 2-8 °C	1,500	In Lab	/
Spinal muscular arthropathy (SMN1 gene exon 7,8) [Rama]	B055	30 Days	PCR-RFLP(restrict fragment length polymorphism)	N/A	EDTA whole blood 5 ml	2-8 °C	2,130	Out Lab	
Spinal muscular arthropathy gene mutation analysis (exon 7,8)(Siriraj)(blood)	B050	45 days	PCR-RFLP(restrict fragment length polymorphism)		EDTA whole blood 6-10 ml	2-8 °C	1,330	Out Lab	
Spinal Muscular Atrophy (deletion/duplication analysis of SMN1 gene)(CGC genetics)	M662	37 Days	MLPA		EDTA whole blood 3 ml	Room temp. (20-25 °C)	19,060	Out Lab	
Spinal Muscular Atrophy Carrier Testing (Seattle Children's Hospital)	B547	21 Days	Multiplex Ligation Probe Analysis (MLPA)		EDTA whole blood 5 ml (minimum 2 ml)	2-8 °C	20,500	Out Lab	
Sputum Culture & Sensitivity(OPD)	E081	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		Sputum (Sterile container)	2-8 °C	300	In Lab	/
Squamous Cell Carcinoma (SCC)(Rama)	N490	5 days	MEIA (microparticle enzyme immunoassay)	0-2.5 ng/mL	serum 1 ml	2-8 °C	870	Out Lab	
SRY-sex determination (Siriraj)	MM088	16 days	polymerase chain reaction (PCR) for SRY gene	NA	EDTA blood 6-10 ml. or Amniotic 12-20 ml with mother's blood(EDTA tube) 2-3 ml.	2-8 °C ,stability: 2 days	840	Out Lab	
Stavudine (d4T) (RAMA)	V692	11 days	HPLC	N/A	EDTA whole blood 6 mL or EDTA plasma 2 mL [Centifuge 1500 rpm 15 minute](Should be sent to subcontract within 6 hrs after blood collecting)	EDTA Whole blood 2-8 °C 6 Hr,Plasma -20 °C 48 Hr.	1,330	Out Lab	
SteatoTest	C897	1 days	Immunoturbidity+Diazonium salt+ L-Gamma-glutamyl-3-carboxy-4-nitroanilide Substrate (Non-IFCC)+Enzymetric+Glycerol Phosphate Oxidase BY Alinity +Nephelometry by Cobas + Atellica Analyser		serum or heparin plasma 1 ml. (if can not separate serum from clote tube immediately must have NaF blood 1 ml for analyse Glucose)	2-8 °C	1,900	In Lab	
Steroid Panel, 5 hormones (LC-MS/MS)	S198	within 10 days	Liquid chromatography tandem mass spectrometry (LC-MS/MS)	As the attached file in Example Lab Report	Serum 1 mL	Store at 2-8 °C .	2,000	In Lab	
Steroids Drug Quantitative/ 1 Drug (Siriraj)	V463	9 days	GC/MS		Traditional and modern drugs : Powders 3-5 gm, Tablets 5 tablets, watery drugs 10 mL.	Room temp	1,500	Out Lab	
STI (Sexually transmitted infection) Multiplex PCR	M520	8 days	Multiplex Real-Time PCR for assigned pathogen		Female : 10-30 mL first-stream urine (ปัสสาวะแรก) , genital swab (vaginal, urethral and cervical) and liquid based cytology specimens; . Male : 10-30 mL first-stream urine (ปัสสาวะแรก) , Urethral swab	2-25 °C	4,050	In Lab	/
Stone analysis (BPL)	C770	11 days	colorimetric method	-	Renal stone in dry container	room temp	1,330	Out Lab	
Stool Concentration Technique (TMC 7 days)	D360	7 days			Stool (Sterile container)	2-8 °C	400	Out Lab	
Stool Culture & Sensitivity(OPD)	E021	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		Stool (Sterile container) or rectal swab	2-8 °C	300	In Lab	/
Stool Examination	D380	1 day	Microscopic examination		Stool (Sterile container)	Room temperature	80	In Lab	/
Stool Examination and Occult Blood	D382	1 day	Microscopic examination		Stool (Sterile container)	Room temperature	100	In Lab	
Streptococcus group A Ag screening (Fluorescence immunoassay)	P347	1 Days	Immunofluorescence assay	Negative	Throat swab (clean and dry no transportation media)	2-8 °C stability 48 hrs	500	In Lab	
Strongyloides / Hook worm culture (Chulal)	D432	9 days		No	Stool, Sputum	room temp	400	Out Lab	
Strongyloidiasis (Tropmed)	P703	18 Days	ELISA		serum 1 ml	2-8 °C	700	Out Lab	
Styrene (Blood)(Reference toxico)	V109	35 Days	GC-MS	no reference range	EDTA blood 3 ml.	2-8 °C	690	Out Lab	
Styrene (Mandelic acid plus phenylglyoxylic acid)(HPLC)	S073	within 7 days (except checkup group)	HPLC	0.00 - 400.00 mg/g creatinine (ACGIH2020)	Random Urine 10-20 mL (End of shift)	Store at 2-8 °C	600	In Lab	/
Styrene (Mandelic acid) (HPLC)	S015	within 7 days (except checkup group)	HPLC	0 - 400 mg/g Creatinine	Random Urine 10-20 mL.(End of shift)	Store at 2-8 °C	380	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Sudd Hypertrophic Cardiomyopathy (HCM) 25 genes (Inter PharmaCare)	M741	8 Weeks	Sequencing microarrays, Next-Generation Sequencing (NGS) and verified by direct sequencing	No mutation	Saliva in collection kit (Provided by Inter PharmaCare)	Room temp	168,000	Out Lab	
Sudden cardiac death screening panel (LMGG)	MM636	3 months	Not informed	N/A	EDTA whole blood 6 ml	2-8 °C	77,000	Out Lab	
Sulfate, Urine [Siriraj]	D203	47 days	ELISA reader	-	Random Urine, 24 hr Urine ปัสสาวะ 30 ml (No preservative or preserved by 10 ml of 10% HCl)	2-8 °C	1,280	Out Lab	
SURF-1 Gene(Siriraj)	M519	3 months	Polymerase chain reaction (PCR) Than follow by direct DNA sequencing		EDTA whole blood 6-10 mL (Min vol. 6 mL)	2-8 °C	9,800	Out Lab	
Susceptibility test for Fungus (Candida only)(Siriraj)	E084	9 days			Colonies of Candida (1. Candida albicans 2. Candida glabrata 3. Candida parapsilosis 4. Candida tropicalis 5. Candida krusei)	room temp	2,000	Out Lab	
Susceptibility test for Tuberculous 2nd Line Drug(Rama)	E461	23 days	culture by MGIT and conventional method identfic		mycobacterium colonies (Colony in Rama)	Room temp	1,950	Out Lab	
Susceptibility test for Tuberculous 2nd Line Drug(Siriraj)	E460	30 Days	susceptibility test	N/A	Mycobacterium tunerculosis complexes colonies	room temp	660	Out Lab	
Susceptibility to Warfarin (CYP2C9 and VKORC1 genes)(CGC genetics)	M669	28 Days			EDTA whole blood 3 ml	Room temp. (20-25 °C)	20,800	Out Lab	
Swab Culture & Sensitivity(OPD)	E011	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		Swab from lesion	2-8oC	300	In Lab	/
Syphilis antibody (Rapid test)	P215	1 days	Immunochromatography	Negative	serum 1 ml	2-8oC	170	In Lab	
Syphilis antibody (Treponema pallidum antibody)	N390	1 day	Chemiluminescent microparticle immunoassay (CMIA)	S/CO < 1 : Non reactive S/CO >= 1 : Reactive	serum 1 ml	24 hrs at room temp , 2 -8 C up to 7 days	185	In Lab	
T cell receptor gene (gamma)(Siriraj)	B039	23 work days	PCR		EDTA Bone marrow (>1 ml), EDTA blood (>1 ml), Body fluid	2-8 °C	12,450	Out Lab	
T cell receptor gene (gamma, beta, delta) Siriraj Hospital	B318	20 days	PCR		EDTA Bone marrow (> 1 ml), EDTA whole blood(> 1 ml), Body fluid	2-8 °C	44,200	Out Lab	
T cell receptor gene re-arrangement(KingChulalongkorn Memorial Hospital)	B235	23 days	Capillary fragmentation		EDTA whole blood or EDTA bone marrow 3 ml +CBC result	2-8 °C	27,600	Out Lab	
t,t Muconic acid [Ramathibodi Hospital]	V817	5 days	HPLC-DAD		random urine 50 ml (minimum 3 ml)	2-8 °C	640	Out Lab	
Tamoxifen pharmacogenetics(CGC genetics)	M668	37 Days	PCR-RFLP		EDTA whole blood 3 ml	Room temp. (20-25 °C)	16,620	Out Lab	
Target mutation testing (LMGG)	M975	23 days	Sanger Sequencing		Adult: EDTA whole blood 6 ml, Children (less than 8 years) : EDTA whole blood 3 ml	2-8°C Stability 7 days	6,000	Out Lab	
TB Culture	E331	2 months	conventional culture method		all types of sample in sterile container	2-8oC	600	In Lab	
TB Culture & sensitivity(Rama)	E619	2 months (in case of no growth)	culture by MGIT and conventional method identfic		all types of sample in sterile container , Unaccept blood and bone marrow ** Need to inform the result of AFB stain in every case	2-8 °C	1,950	Out Lab	
TB Culture (Automate) & Suscept (Automate)	E335	46 days (in case of no growth)	culture=Automate (MGIT) AST=Automate (MGIT)		All types of sample in sterile container blood or bone marrow in TB Hemo bottle Remark : blood or bone marrow must be collected in TB Hemo bottle 5 ml	2-8 °C TB Hemo bottle-room temperature	1,450	In Lab	
TB Culture (Automate) & Suscept(Automate) & PCR with drug sensitivity (INH,RIF)	E339	46 days	Measure the level of fluorescent which corresponds to the amount of oxygen consumed by organisms and In-house RT - PCR with drug sensitivity.		Any sample in sterile container (* Except Stool) -Sputum 3-5 ml -CSF 1-3 ml -Fluid,Pus 3-50 ml -Urine 10-50 ml -Tissue 5 mm - 3 cm - Swab(Plastic) in sterile container ***ปัสสาวะ Stool*** Remark : if sample is blood or bone marrow it must be collected in TB Hemo bottle 5 ml together with EDTA whole blood 3 ml	2 - 8 C	3,900	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
TB Culture (Automate)&Suscept(Automate) & PCR	E337	46 days (in case of no growth)	PCR Culture=Automate (MGIT) AST=Automate (MGIT)		All types of sample in sterile container blood or bone marrow in TB Hemo bottle Remark : if sample is blood or bone marrow it must be collected in TB Hemo bottle 5 ml together with EDTA whole blood 3 ml	2-8 °C TB Hemo bottle-room temperature	3,050	In Lab	
TB Culture (Conventional method)	E330	60 days	conventional culture method		All types of sample in sterile container ไม่สามารถทำการตรวจวิเคราะห์จาก Bonemarrow/Blood ได้ หากต้องการตรวจชนิด Specimen Bonemarrow/Blood ให้ทำการเก็บใส่ขวด Hemo for TB ปริมาณ 5 ml. (Myco F lytic ฝาสีแดง) แล้ว Key E091 hemo for TB แทน ไม่รับขวดที่ detect Positive จากเครื่องตรวจวิเคราะห์แล้ว	2-8oC	520	In Lab	
TB Culture (MGIT) ThaiChest	E332	42 days (No growth)	liquid phase culture (Bactex) and conventional method	N/A	all types of sample in sterile container , Unaccept blood and bone marrow	2-8 °C	1,500	Out Lab	
TB Culture for VISA screening	E421	8 weeks	Microbial culture using Solid media(LJ) and Liquid Media (MGIT)		Sputum minimum 3 ml. recommend 5-10 ml.	2-8 C in sterile Container (Storage 1 weeks)	2,300	In Lab	
TB Direct susceptibility test (DS)	E333	30 Days	Direct susceptibility test (DS) คือน้ำ specimen มาท		sputum , pus , bone marrow	2-8 °C	350	Out Lab	
TB Fast Plaque (Phramongkutklao Hospital)	E341	11 days	Fast Plaque	Negative	secretion or tissue in sterile container	2-8 °C	750	Out Lab	
TB FAST TRACK [Siriraj Hospital]	E420	42 Days	AFB stain , PCR , Culture in liquid phase		any specimen in sterile container (Except Blood)	2-8 °C	4,050	Out Lab	
TB PCR and drug sensitivity (INH, RIF, FQ, and injectable drug)	M462	3 days	Real-time PCR (DPO and TOCE) for - IS6110 and MBP64 for MTB - 16S rRNA for NTM - katG and inhA promoter for INH-R - rpoB for RIF-R - gyrA for FQ-R - rrs and eis promoter for injectable drug		Respiratory specimen/CSF/ body fluid 1 mL EDTA whole blood, EDTA bone marrow 3-5 mL. Fresh tissue size 1 cm. ***ไม่รับ Stool***	2-8°C	8,800	In Lab	
TB/MDR Real-time test (BML)	M073	3 days	Real-time PCR		Respiratory specimen/CSF/ body fluid 1 mL EDTA whole blood, EDTA bone marrow 3-5 mL. Fresh tissue size 1 cm. / sputum ***ไม่รับ Stool***	2-8°C for up to 1 week	2,950	In Lab	
TB-DNA (PCR for TB) [Rama]	E334	11 days	PCR	Negative	Fluid or CSF 1 ml or Tissue or Urine or Sputum or Stool in sterile container	The subcontract inform the storage condition for test code E334 is 4 degree Celsius, but in case transportation between country should be -20 degree Celsius on dry ice	2,300	Out Lab	
Telomere length (Blood) (Wincell)	M795	9 Days	Real Time PCR		EDTA whole blood 6 mL. (EDTA tube 3 mL. จำนวน 2 หลอด หรือ EDTA tube 2 mL จำนวน 3 หลอด)	2-8 °C (stability 60 Hrs)	6,500	Out Lab	
Tenofovir level (Chula)	C207	30 Days	HPLC		Heparinized plasma 2 ml , Freeze (collect blood after drug uptake 12 hours) + Special request form	Frozen	1,900	Out Lab	
TERT promoter mutation(Chula genepro)	MM954	16 days	Detect TERT C228T and C250T promoter mutation by pyrosequencing		FFPE Block (This block have carcinoma cells) + H & E Slide + Pathology report	Room temperature	5,175	Out Lab	
Testosterone	N305	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	350	In Lab	/
Tetanus IgG (Rama)	N505	11 days	EIA		serum 1 ml	2-8 °C	640	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Tetrahydrofuran (Reference toxico)	V767	Not guarantee TAT	GC	ACGIH 0 - 2 mg/l (6/11/14)	random uine 20 ml	2-8 °C	690	Out Lab	
Tetrahydrofuran in Urine (HS-GC-MS)	S083	within 5 days (except checkup group)	Gas Chromatography mass spectrometry (HS-GC-MS)	0.00 - 2.00 mg/L (ACGIH2020)	Random Urine 5-10 mL (End of Shift)	Store & Transport at 2-8°C	600	In Lab	/
Thallium in Blood (ICP-MS)	S052	within 7 days (except check up group maybe longer)	ICP-MS	0.01 - 0.24 ug/L Forensic Science International 153(2005)39-44.	EDTA plasma 1 mL.	Store at 2-8 °C	550	In Lab	
Thallium in Urine (ICP-MS)	S280	within 7 days (except check up group maybe longer)	ICP-MS	0.07 - 0.84 ug/L Forensic Science International 153(2005)39-44.	Random Urine 5-10 mL .	Store at 2-8 °C	550	In Lab	
Thanatophoric dysplasia common mutation (FGFR3 Exons 7,10,15,19) (LMGG)	MM521	1 month	Next-Generation sequencing		EDTA whole blood 6 ml.	2-8 °C	9,100	Out Lab	
Theophylline (Aminophylline)	V230	1 day	kinetic interaction of microparticles in a solution (KIMS)		serum 1 ml	2-8 °C	800	In Lab	/
Thiocyanate (Blood)(Ramathibodi Hospital)	V555	5 days	Spectrophotometry	(Nonsmoker = 1-4 ug/mL) (Smoker = 3-12 ug/mL)	serum 2 ml	2-8 °C	380	Out Lab	
Thiocyanate (Urine 24 Hr) (Ramathibodi Hospital)	V118	9 days	HPLC		Urine 24 hr. 50 ml. Pease note total volume every case	2-8 °C	860	Out Lab	
Thiocyanate (Urine) [Special Lab Center]	V556	16 days	spectrophotometry	(Normal person < 2.5 mg/g creatinine) (Exposed person < 6.0 mg/g creatinine)	urine 30 m (minimum volum 10 ml.)	2-8 °C	400	Out Lab	
Thiopurine S-methyltransferase deficiency (sequence analysis of TPMT gene) (CGC)	MM597	37 days	Multiplex PCR of the coding regions of the TPMT gene (NM_000367.3; chr. 6), and corresponding intron/exon boundaries (±8 bp), including the TPMT*2, TPMT*3A, TPMT*3B, TPMT*3C, TPMT*4A, TPMT*8 and TPMT*23 alleles. Library preparation was performed by tagmentation (QXT, Agilent Technologies), followed by next generation sequencing (MiSeq, Illumina). Alignment and variant calls were generated using the Dragen workflow (Illumina), followed by bioinformatics analysis of the detected variants. When necessary, Sanger sequencing was used for regions where there are bases with a minimum coverage of less than 20X. The classification and reporting of the variants is performed according to the international recommendations (PMID: 25741868). Pathogenic, probably pathogenic and variants of unknown clinical significance are reported; benign and probably benign variants are not reported. All reported variants are confirmed by independent Sanger sequencing. This analysis does not exclude variants outside of the analyzed regions or not detected by this methodology (for example, gross deletions or duplications, triplet repeat expansion, epigenetic alterations or variants with low level mosaicism). Primer design was performed in order to guarantee specificity and in regions without known genetic variation. Nevertheless, it cannot be excluded that pseudogene sequences or highly-homologous sequences interfere with the technical ability to identify variants in this analysis. Additionally, allele dropout cannot be excluded due to the occurrence of rare polymorphisms that might interfere with primer annealing. The result and interpretation dependon the proper identification of the received sample and the clinical information provided.		EDTA whole blood > 3 mL Stability 5 days	Room temp. (20-25 °C)	34,785	Out Lab	
Thrombin Time	K070	1 day	Automated Blood Coagulation Analyzer; Symex CS-2500		Na Citrate plasma 1 ml	Freeze	300	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Thromboelastography without Fibrinolysis	K462	1 day	Viscoelastic Thromboelastography / Resonance frequency		3.2% sodium citrate tubes 1 tube	Should be tested following a minimum of 15 minutes of incubation after collection in citrated tubes. Samples should not be tested following more than 2 hours post-collection.	8,250	In Lab	
Thrombophilia MTHFR (Siriraj Hospital)	M718	18 days	allele specific amplification (ASA) only MTHFR677C>T point		EDTA whole blood 5 ml + clinical history	2-8 °C	1,250	Out Lab	
Thrombosis (Factor V, Prothrombin and MTHFR) [BML]	M396	8 days	Multiplex Real-time PCR and Melting curve analysis		EDTA Whole blood 3-5 mL	Room temperature (1 day), 2-8°C (1 month)	2,235	In Lab	
Thyroglobulin Antibody.	T150	1 day	Chemiluminescent microparticle immunoassay (CMIA)	0-4.11 IU/ml	serum 1 ml	2-8oC	350	In Lab	/
Thyroglobulin Level	T170	2 days	Electrochemiluminescence		serum 1 ml	2-8oC	500	In Lab	/
Thyroid Hormones (Urine) [ADL]	N797	23 days			random urine or 24 hour-urine	2-8 °C	4,380	Out Lab	
Thyroid Stimulating Hormone(TSH)	N010	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	200	In Lab	/
Thyroid-Stimulating Immunoglobulin (TSI) (Mayo)	N773	13 days	Recombinant Bioassay	< or =1.3 TSI index Reference values apply to all ages.	SERUM 1 ml	Frozen 60 days	14,960	Out Lab	
Thyroxine (T4)	N006	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	150	In Lab	/
Thyroxine binding globulin (TBG)(BRIA)	N325	35 days	RIA	11-27 ug/ml	serum 2 ml	2-8 °C	13,750	Out Lab	
Thyroxine Free (Free T4)	N030	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	150	In Lab	/
Tick-Borne Encephalitis Virus PCR (King Chulalongkorn Memorial Hospital)	H206	11 days	Qualitative Real-time PCR		CSF 2 ml, EDTA plasma 3 ml	2-8 °C	2,500	Out Lab	
Tin in Blood (ICP-MS)	S053	within 7 days (except check up group maybe longer)	ICP-MS	0.15 - 2.70 ug/L Forensic Science International 153(2005)39-44.	EDTA plasma 1 mL .	Store at 2-8 °C	500	In Lab	
Tin(Special Lab Center)	V625	11 days	GF-AAS		EDTA whole Blood 2 ml or urine 30 ml	2-8 °C	500	Out Lab	
Tissue Culture & Sensitivity(OPD)	E041	3-5 days	Automate Method :Vitek MS&Vitek 2 XL		Tissue (fresh)	2-8oC	300	In Lab	/
Tissue transglutaminase IgA	N906	3 days	ELISA	0-20 RU/ml	serum 1 ml	2-8 °C	3,000	In Lab	
Tissue transglutaminase IgG	N907	3 days	ELISA	Negative	serum 1 ml	2-8 °C	3,000	In Lab	
Toluene (Blood) [Referencetoxico]	V584	N/A	GC Headspace		EDTA whole blood 3 ml (minimum 1 ml)	2-8 °C	690	Out Lab	
Toluene (Hippuric acid) (HPLC)	S016	within 7 days (except checkup group)	HPLC	0.0-1.600 g/g Creatinine	Random Urine 10-20 mL.(End of shift)	Store at 2-8 °C	400	In Lab	/
Toluene (Hippuric acid) (Urine) (Ramathibodi Hospital)	V587	7 days	SPME-GCMS	< 0.03 mg/L (ACGIH 2014)	Urine 10 ml	2-8 C	460	Out Lab	
Toluene (o-Cresol) in Urine (HPLC)	S066	within 9 days (except checkup group)	High Pressure Liquid Chromatography (HPLC) with hydrolysis	0.00 - 0.30 mg/g creatinine (ACGIH2020)	Random Urine 10-20 mL (End of Shift)	Store at 2-8 °C	495	In Lab	/
Toluene in Blood (HS-GC-MS)	S095	within 5 days(except checkup group)	GC-MS	0.00 - 0.02 mg/L (ACGIH 2020)	NaF or EDTA whole Blood 2 mL.	Store at 2-8 °C	550	In Lab	/
Toluene in Urine (HS-GC-MS)	S308	within 5 days(checkup group maybe longer)	GC-MS	0.00 - 0.03 mg/L (ACGIH 2020)	Random Urine 5-10 mL (End of shift)	Store at 2-8 °C	550	In Lab	/
Topiramate level (RAMA)	V811	9 days	Gas Chromatography/Mass Spectrometry (GC/MS)	Therapeutic: (2) 4 - 10 (20) mg/L Toxic: 20 - 25 mg/L Lethal: Not applicable	Clotted blood 2 ml , Serum 1 ml (DO NOT USE GEL TUBES) or NaF whole blood (only) 1 ml	2-8 °C	2,375	Out Lab	
TORCH Agent	P758	3 days	indirect immunofluorescence assay, electrochemiluminescence	non-reactive	serum 1 ml	2-8oC	1,500	In Lab	
TORCH IgM titer (BPL)	P759	5 days	IFA	-	serum 2 - 3 ml minimum 0.4 ml	2-8 °C	3,750	Out Lab	
Total Acid Phosphatase (BRIA)	C515	3 days	kinetic assay		serum 1 ml (minimum 0.3 ml)	2-8 °C	440	Out Lab	
Total CO2	C555	1 day	PEP Carboxylase		serum 1 ml	2-8 °C	65	In Lab	/
Total Iron Binding Capacity	N105	1 day	Iron : Colorimetric assay UIBC : Direct determination with FerroZine		serum 1 ml	2-8 °C	200	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Total Protein	C620	1 day	Total protein : Biuret.. Albumin : Bromcresol Green	Total protein 6.6 - 8.7 g/dl	serum 1 ml	2-8 °C	100	In Lab	/
TotalHealthGeneInsight (ThaiStemLife)	M720	6 weeks	Next Generation Sequencing (Illumina) and Microarray (Affymetrix)	SNP type present or not	Buccal swab (in special test kit)	Room Temp	37,878	Out Lab	
TotalHealthGeneInsight + NutriFitGeneInsight (Combo)(ThaiStemLife)	M761	6 weeks			Buccal swab (in special test kit)	Room Temp.	41,000	Out Lab	
Toxic Element Clearance Profile (Timed or 24-Hour) (Urine)(Thai cell Fix)	V703	21 days			2 tubes of urine	x	13,940	Out Lab	
Toxic Metals in Blood Profile 2 (Pb, Hg, Cd, Mn, Cr, Co, Ni, As, Al)(ICP-MS)	S264	within 5 days (except check up group maybe longer)	ICP-MS	as report format	EDTA Whole Blood 1 mL** and EDTA Plasma 1 mL**	Store at 2-8 °C	2,500	In Lab	
Toxic Metals in Urine Profile 2 (Pb, Hg, Cd, Mn, Cr, Co, Ni, As, Al)(ICP-MS)	S263	within 7 days (except check up group maybe longer)	ICP-MS	(as report format)	1) Random Urine 5-10 mL . 2) 24 Hr Urine (or 12 Hr, 6 Hr Urine) 5-10 mL . ** No preservative & Record total volume**	Store at 2-8 °C	1,900	In Lab	
Toxic Metals Profile in Blood-Cr, Co, Mn, Ni, Hg, Pb, Cd (ICP-MS)	S261	within 5 days (except check up group maybe longer)	ICP-MS	as report format	EDTA Whole Blood 1 mL**	Store at 2-8 °C	1,800	In Lab	
Toxic Metals Profile in Drinking Water-As, Pb, Hg, Cd, Mn, Cr, Co, Ni (ICP-MS)	S262	within 17 days	ICP-MS	As: < 10.000 ug/L, Pb: < 10.000 ug/L, Hg: < 6.000 ug/L, Cd: < 3.000 ug/L, Mn: < 400.000 ug/L, Cr: < 50.000 ug/L, Co: N/A, Ni: < 70.000 ug/L WHO Guidelines for drinking-water quality, third edition, incorporating first and second addenda (2008).	Drinking water 20-50 mL in new plastic tube (trace element free tube). Define type/source of water .	Store at 2-8 °C	3,000	In Lab	
Toxic Metals Profile in Urine-Cr, Co, Mn, Ni, As, Hg, Pb, Cd (ICP-MS)	S260	within 7 days (except check up group maybe longer)	ICP-MS	as report format	1.Random Urine 5-10 mL . ** 2.24 Hr Urine (or 12 Hr, 6 Hr Urine) 5-10 mL . ** (No preservative,Record total volume)	Store at 2-8 °C	1,600	In Lab	
Toxo Sensor (Rapport/Genosense)	B620	35 days	SNPs		Buccal swap in special kit	Room Temperature	14,700	Out Lab	
Toxocara Antibody (Tropmed)	P716	16 days	immunoblot		serum 1 ml	2-8 °C	700	Out Lab	
Toxoplasma IgG (BGH)	N685	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	400	In Lab	/
Toxoplasma IgG titer (CSF)(BPL)	N691	5 days	IFA		CSF 1 ml, other fluid unaccepted	2-8 °C	1,250	Out Lab	
Toxoplasma IgG titer (serum) (BPL)	N688	4 days	IFA	Less than 1:16	serum 1-2 ml , other fluid unaccepted	2-8 °C	1,250	Out Lab	
Toxoplasma IgM	N690	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	400	In Lab	/
Toxoplasma IgM titer (CSF)(BPL)	N692	5 days	IFA		CSF 1 ml, other fluid unaccepted	2-8 °C	1,250	Out Lab	
Toxoplasma IgM titer (serum) (BPL)	N689	3 days	IFA	Negative (<1:16)	serum 1-2 ml , other fluid unaccepted	2-8 °C	1,250	Out Lab	
Toxoplasma PCR [Rama]	H180	5 days	Real time PCR	Negative	EDTA whole blood 5 ml or plasma 2 ml, Body fluid 500 ul (CSF,urine,etc.),	2-8 °C (plasma freeze)	1,900	Out Lab	
TP53 Mutations (Exon 5 - 8)(Chula GenePro)	M759	18 days	PCR		Tissue in paraffin block + H&E slide + Pathology report	room temp	10,500	Out Lab	
TPHA(Ramathibodi Hospital)	P216	9 days	Passive Hemagglutination	non-reactive	CSF 1 ml (minimum volume 100 ul) or Serum 1 ml	2-8 °C	350	Out Lab	
Trace Element (36 Element)(Hair Analysis)(Rapport)	V708	30 days	Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)		Hair 125 mg. in special kit	Room temp	10,000	Out Lab	
Trace Elements Profile in Blood- Cu, Li, Mo, Se, Ti, Sn, Zn (ICP-MS)	S290	within 9 days (except check up group maybe longer)	ICP-MS	Cu 794.00 - 2023.00 ug/L, Li 1.80-18.80 ug/L, Mo 0.67-1.68 ug/L, Se 79.00-141.00 ug/L, Ti 0.01-0.24 ug/L, Sn 0.15-2.70 ug/L, Zn 551.00-925.00 ug/L	EDTA plasma (Trace element free) 1 mL**,**	Store at 2-8 °C	2,100	In Lab	
Trace Elements Profile in Urine-Cu, Se, Ti, Zn (ICP-MS)	S295	within 7 days (except check up group maybe longer)	ICP-MS	Copper : 4.30-12.10 ug/L, Selenium: 10.50-45.50 ug/L, Thallium: 0.07-0.84 ug/L, Zinc : 44.00-499.00 ug/l	1.)Random Urine 5-10 mL . 2.)24 Hr Urine (or 12 Hr, 6 Hr Urine) 5-10 mL . ** No preservative & Record total volume**	Store at 2-8 °C	1,000	In Lab	
Transferrin (BRIA)	N245	3 days	Turbidimetry		serum 1 ml	2-8 °C	940	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Transferrin Saturation	N246	1 day	Iron : Colorimetric assay UIBC : Direct determination with FerroZine		serum 1 ml	2-8 °C	350	In Lab	
TRIAD Bloodspot Profile(Thai Cell Fix)	C206	21 Days	LC/MS-MS, HPLC, Spectrophotometry, EIA		Urine and Blood Spot (special Kit) email inform subcontractor before sending specimen (E-mail:kobkulss@hotmail.com; piyatida.sukhakul@gmail.com; banaba_split@hotmail.com)	Bloodspot = Room Temp. Urine = Frozen	37,800	Out Lab	
Trichinella Antibody (TMDR)	P120	16 days	immunoblot		serum 1 ml	2-8 °C	700	Out Lab	
Trichloroacetic Acid (RAMA)	V576	5 days	GC-Headspace	0-15 mg/l	urine 20 ml	2-8 °C	460	Out Lab	
Trichloroacetic acid (TCA) in Urine (HS-GC-MS)	S031	within 9 days (except checkup group)	Gas Chromatography mass spectrometry (HS-GC-MS)	0.00-10.00 mg/L for Methyl Chloroform exposed . 0.00-15.00 mg/L for Trichloroethylene exposed . Reference range obtained from American Conference of Governmental Industrial Hygienists (ACGIH) 2020	Random Urine 5-10 mL(End of shift at end of workweek)	Store at 2-8°C	450	In Lab	/
Trichloroethanol (TCE) [Special Lab Center]	V901	11 days	spectrophoresis		Urine 30 mL (end of shift)	7 days at 2-8 °C	380	Out Lab	
Trichloroethanol (TCE) in Blood (HS-GC-MS)	S108	within 9 days (except checkup group)	Gas Chromatography mass spectrometry (HS-GC-MS)	0.00-0.50 mg/L for Trichloroethylene exposed . 0.00-1.00 mg/L for Methyl Chloroform exposed . Reference Range obtained from "The American Conference of Governmental Industrial Hygienists (ACGIH) guidelines for occupational health (2020)"	EDTA whole blood 2 mL Sampling time: End of shift at end of workweek	Store at 2-8°C	450	In Lab	
Trichrome Stain (Hospital for Tropical Diseases)	D245	11 days	Trichrome stain		stool, Fluid, Pus	2-8 °C	640	Out Lab	
Tricyclic Antidepressants(Siriraj Hospital)	V365	3 days	FPIA (Axsym) : Fluorescence Polarization Immunoassay	50-100 ng/mL	serum 1 ml or random urine 10 ml or gastric content 10 ml, EDTA Plasma (Whole blood 3 – 5 ml) Sodium Heparin plasma and Oxalate plasma	2-8 °C	1,150	Out Lab	
Triglyceride (BGH,BNH)	C650	1 day	Glycerol Phosphate Oxidase	< 150 mg/dl.	serum 1 ml	2-8oC	130	In Lab	/
Triiodothyronine (T3)	N005	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	150	In Lab	/
Triiodothyronine Free (Free T3)	N025	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	350	In Lab	/
Trio (Karyotype + QF-PCR + Array CGH) (BCC)	MM974	step 1 PCR = 3 days , step 2 karyotype = 16 days (from sent date) , step 3 = 21 Days	Karyotype + QF-PCR + Array CGH. Comparative Genome Hybridization (CGH) in Cytoarray Oligo ISCA (60K) based in the genome construction hg19. The microarray contains more than 60.000 probes, especially designed to detect the copy number variations in regions related to mental retardation, developmental retardation, or polymalformative syndrome, among others. A commercial diploid DNA without alterations was used as a reference.		Amniotic fluid 30 ml	Room temperature (over night storage at 2-8 oC)	37,500	Out Lab	
Trio (QF-PCR, Karyotyping, Array CGH Optima) (BCC)	MM060	16 days			Amniotic fluid 25-30 ml	4oC	28,000	Out Lab	
Triple Markers	N159	6 days	Time Resolved Fluorescence (TRF)	Screening negative	serum 2 ml	2-8oC	1,600	In Lab	/
Triple Markers (BR1A)	N975	14 Days	EIA		serum 2 ml	2-8 °C	3,000	Out Lab	
Triple Markers (Rama)	N974	14 Days	EIA		serum 2 ml	2-8 °C	1,760	Out Lab	
Troponin I (High sense)	N991	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8oC	400	In Lab	/
Troponin I (High sensitive) for Risk Stratification of CVD	N898	1 day	MEIA = Microparticle Enzyme Immunoassay	pg/mL	serum 1 ml	2-8oC	400	In Lab	
Troponin T (High sense)	C096	1 day	Electrochemiluminescence immunoassay "ECLIA"		serum 1 ml	2-8 °C	450	In Lab	/
Trypanosoma cruzi Antibody (Quest diagnostic)	N874	14 Days	Immunoassay		Serum (Standard: 0.5 mL) Minimum Volume 0.2 mL	Freeze	27,700	Out Lab	
Trypanosoma staining (Hospital for tropical diseases)	A821	5 days	Giemsa stain		EDTA whole blood 2ml	2-8 °C	410	Out Lab	
Tryptase (Immunocap)	J131	3 days	Fluoroenzymeimmunoassay	0.0 - 11.0 ug/L	Serum 1 ml	2 - 8 C up to 1 week , room temp up to 2 days .	3,000	In Lab	/
Tryptase (Rama)	N540	11 days	EIA (Pharmacia UniCap)	1.9-13.5 ng/dl	serum 1 ml	2-8 °C	1,400	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
TSH & PKU screening for newborn (N Health)	B589	7 days	ELISA assay	TSH < 20 µU/ml PKU 0.6 - 3.6 mg/dl	Dried blood spot	2 - 8 °C	750	In Lab	
TSH & PKU screening for newborn (N Health-Wellness)	S801	within 3 days	TSH :Enzyme linked immunoassay for the quantitative determination of Thyroid Stimulating Hormone(TSH) from newborn dried blood spots. PKU (as Phenylalanine) = Enzymatic assay for the quantitative determination of Phenylalanine levels from newborn dried blood spots.		2 spots of dried blood on 903 filter paper.	Room temp	700	In Lab	
TSH Receptor Antibody	N771	1 day	chemiluminescence	0.00 - 1.75 IU/L	serum 3 ml	2-8 °C	1,100	In Lab	
TT Mixing Test	K320	1 day	Automated Blood Coagulation Analyzer; Symex CS-2500		Na Citrate plasma 1 ml	Freeze	800	In Lab	
Tumor markers profile (BRIA)	C102	9 days			serum 2 ml	2 - 8 oC	4,600	Out Lab	
TZANK'S SMEAR	D405	1 day	Microscopic examination		Exudate from lesion smear on slide	Room temperature	65	In Lab	
UGT1A1 gene polymorphism (TA7/-3279/G71R/F83L) (Atgenes)	MM080	16 days	PCR-RFLP and PCR direct sequencing		EDTA whole blood 3-5 ml	2-8°C	7,700	Out Lab	
UGT1A6 gene polymorphism (57A/T181A/R184S) (Atgenes)	MM081	12 days	PCR-RFLP		EDTA whole blood 3-5 ml	2-8°C	5,600	Out Lab	
Undercarboxylated Osteocalcin (UCOC)(VitechPro)	N521	20 days	ELISA		serum 1 ml.	Frozen	7,500	Out Lab	
Urea Nitrogen(24 Hrs Urine)	C406	1 day	Urease		24-hrs urine (No Preservative)	2-8 °C	65	In Lab	
Urea Nitrogen(Random Urine)	C405	1 day	Kinetic test with urease and glutamate dehydrogenase		Random urine 5 ml	2-8 °C	65	In Lab	
Ureaplasma urealyticum / Mycoplasma hominis(bumrungrad)	E459	5 days	Biochemistry	Negative	genital swab in special kit	- specimen keep at room temperature for 48 hours and 2-8 °C for 72 hours	2250.00	Out Lab	
Urgent for 24 chromosomes aneuploidy screening by NGS(BML)	MM100	24 hrs.	Next-generation sequencing (NGS)		Embryos : Cleavage Stage Day 3 or Blastocyst Day 5 or Day 6 : STAT	Biopsy sample should be freeze and store at -20C.	21,000	In Lab	
Uric Acid	C120	1 day	Uricase	Male 3.4 – 7.0 mg/dl ; Female 2.4 – 5.7 mg/dl.	serum 1 ml	2-8 °C	80	In Lab	/
Uric Acid (Urine)	C400	1 day	Uricase		Random urine 5 ml or 24 hrs Urine in NaOH(1M) 1ml : Urine 1 L	15-25 °C (Do not refrigerate)	80	In Lab	/
Urine Catecholamine (HPLC)(Ramathibodi Hospital)	C417	21 days	HPLC	Epinephrine.....: 4 - 20 ug/24 hrs Norepinephrine.....: 23 - 105 ug/24 hrs Dopamine.....: 190 - 450 ug/24 hrs	24 hour urine in a bottle containing 15 mL conc. Hydrochloric acid ,Protect from light. Specimen transportation and storage: Separate 30-50 mL of 24 hour urine in light protected container and record total volume.	2-8 °C	4,030	Out Lab	
Urine Culture & Sensitivity(OPD)	E031	2-5 days	Automate Method :Vitek MS&Vitek 2 XL		Midstream urine in sterile container	2-8 oC	300	In Lab	/
Urine Examination	D111	1 day	1. เครื่องตรวจวัดแถบทดสอบมีสีขาวแบบกึ่งปริมาณอัตโนมัติ uc-3200 2. เครื่องตรวจนับตะกอนมีสีขาวอัตโนมัติ UF-5000		Random urine 10 ml	2-8 °C	80	In Lab	/
Urine for organic acid (ATGenes)	C951	16 Days	GC/MS		First morning urine 30 ml	Frozen	6,300	Out Lab	
Urine for Organic Acid (Siriraj Hospital)	D230	30 Days	GC/MS		First morning urine 30 ml (frozen if cannot perform in same day) minimum 10 ml	Frozen	5,180	Out Lab	
Urine free Cortisol (siriraj)	N979	11 days	Solid phase radioimmunoassay (RIA)	Reference value 0 - 150 ug/day	Urine 24 Hrs., No preservative (10 mL)	2-8 °C	540	Out Lab	
Urine Organic Acid [Rama]	C984	20 days	GC-MS		First morning urine 30 ml (frozen if cannot perform in same day) minimum 5-10 ml	Frozen	3,625	Out Lab	
Urine Oxalate (BRIA forward to NUH (Singapore))	D445	35 days	N/A		24 Hr Urine (preserved by 30 ml of 6N HCl) Vol. 50 ml	2-8 °C or 15-25 °C	5,600	Out Lab	
Urine Protein Electrophoresis	T781	8 days	ELP	No monoclonal was detected	urine random 20 ml or 24 hrs-urine (no preservative)	2-8 °C	12,600	In Lab	
Uroporphyrins (Ramathibodi Hospital)	V565	6 days	Spectrophotometry		5g Na2CO3/urine 24 hr separate sending 200 ml , protected from light	2-8 °C	580	Out Lab	
Valproic Acid (Depakine)	V220	1 day	Chemiluminescent microparticle immunoassay (CMIA)		serum 1 ml	2-8 °C	450	In Lab	/
Vancomycin (P&T)	V110	1 day	Homogeneous enzyme immunoassay		serum 1 ml	2-8°C	300	In Lab	/
Vanillylmandelic Acid(VMA) Urine-HPLC (24-h Urine)	S200	within 10 days	HPLC	1.60-7.30 mg/24h urine	24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volumn.	Store at 2-8 °C .	2,850	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Varicella Zoster IgG	P764	2 days	ELFA (Enzyme-linked fluorescence assay)	Negative < 0.60 COI Equivocal >=0.60 - < 0.90 COI Positive >=0.90 COI	serum 1 ml	2-8°C 7days	360	In Lab	/
Varicella Zoster IgG (EIA Quantitative) (BPL)	P791	3 days	EIA	Negative (<100 miu/ml)	serum 1-2ml	2-8 °C	750	Out Lab	
Varicella Zoster IgG IFA (CSF)(BPL)	P778	3 days	IFA	Negative (1:4)	CSF 1-2ml	2-8 °C	1,250	Out Lab	
Varicella Zoster IgM (BRIA)	P765	7 days	EIA		serum 1 ml	2-8 °C	800	Out Lab	
Varicella Zoster IgM (IFA titer)(BPL)	P760	3 days	IFA	Negative (<1:10)	serum 1-2 ml	2-8 °C	1,250	Out Lab	
Varicella Zoster IgM IFA (CSF)(BPL)	P779	4 days	IFA	Negative (<1:4)	CSF 1-2 ml	2-8 °C	1,250	Out Lab	
Varicella zoster virus - infected cell Ag(Chula)	H163	3 days	Indirect Immunofluorescence Assay		Cell from lesion in slide 2 slides	2-8 °C (stability 2 days)	750	Out Lab	
Varicella Zoster Virus (VZV) PCR	M230	3 days	Real-time PCR		EDTA Plasma or serum 1 mL / CSF 500 uL / Vesicle fluid ,Vesicle Swab (Update: 18/10/2019)	2-8°C (Separate plasma within 6 hours of collection)	2,000	In Lab	
Varicella zoster virus antigen(Siriraj)	H066	5 days	Immunofluorescent assay	-	Vesicular scrape (on slide)	2-8 °C	1,010	Out Lab	
Vasoactive Intestinal Polypeptide (VIP)(Mayo)	T527	15 Days	Radioimmunoassay (RIA)	<75 pg/mL	EDTA plasma 2 ml	Freeze (stability 90 Days)	20,300	Out Lab	
VDRL (RPR)	P010	1 day	RPR		serum 1 ml	2-8 °C	60	In Lab	/
VDRL (Siriraj Hospital)	P011	7 days	Flocculation		Serum or CSF 1 ml (minimum 0.5 ml)	2-8 °C	300	Out Lab	
Verifi NIPT (NGG)	M978	12 Days	Next generation sequencing [NGS] with chromosome counting algorithm		7-10 mL Whole Blood in Streck BCT tube, Mix blood by gentle inversion 8-10 times	room temperature	25,200	Out Lab	
Verifi NIPT Plus Microdeletions (NGG)	M979	12 Days	Next generation sequencing [NGS] with chromosome counting algorithm		7-10 mL Whole Blood in Streck BCT tube, Mix blood by gentle inversion 8-10 times	room temperature	30,240	Out Lab	
Verifi PLUS All chromosome(NGG)	MM778	12 Days	Massive Parallel Sequencing		7-10 mL Whole Blood in Streck BCT tube, Mix blood by gentle inversion 8-10 times	room temperature	30,800	Out Lab	
Verifi PLUS Microdeletion and All chromosome(NGG)	MM779	12 Days	Massive Parallel Sequencing		7-10 mL Whole Blood in Streck BCT tube, Mix blood by gentle inversion 8-10 times	room temperature	36,400	Out Lab	
Very Long Chain LysoPC(screen for peroxisomal disorders)(Kennedy Krieger Institute)	C960	15 days	LC-MS/MS		6-12 circles of blood spot on filter paper	room temp	7,250	Out Lab	
Vibrio cholerae O1 /O139 Antigen (DMSC)	P125	16 days	culture , biochem test , agglutination		Vibrio cholerae 5 colonies on Nutrient agar or Muller Hinton agar	Room temp	520	Out Lab	
Viral Meningitis Panel Multiplex PCR (Neuro 11) [BML]	M418	3 days	Multiplex real-time PCR for 11 assigned virus		CSF 0.5 mL / EDTA plasma 1 mL	2-8°C / Frozen (Separate plasma within 6 hours of collection)	4,000	In Lab	
Vitamin A (HPLC)	S001	within 7 days	HPLC	229-831 µg/L	Serum 1 ml	Light protected at 2-8 °C	1,000	In Lab	/
Vitamin B1 (HPLC)	S002	within 10 days	HPLC	28-85 µg/L	EDTA whole blood 1 ml	Light protected at 2-8 °C	1,400	In Lab	/
Vitamin B12	N950	1 day	Chemiluminescent microparticle immunoassay (CMIA)	F/MB-999188-887µg/mL	serum 1 ml (Vitamin B12 determinations should be performed on serum or plasma samples from fasting patients.)	2-8 °C protected from light	350	In Lab	/
Vitamin B2 (HPLC)	S003	within 10 days	HPLC	180-295 µg/L	EDTA whole blood 1 ml	Light protected at 2-8 °C	1,400	In Lab	/
Vitamin B3 (Niacin and Metabolites)(Questdiagnostics)	C216	30 Days	High Performance Liquid Chromatography/Tandem Mass Spectrometry		Serum 2 ml (DO NOT USE GEL TUBES) Minimum Volume 1 mL	Refrigerated: 7 Days Frozen: 30 Days	19,800	Out Lab	
Vitamin B6 (HPLC)	S004	within 10 days	HPLC	8.70-27.20 µg/L	EDTA whole blood 1 ml	Light protected at 2-8 °C	1,400	In Lab	/
Vitamin C (HPLC)	S005	within 7 days	HPLC	2.00-14.00 mg/L	Serum 1 ml	Light protected at 2-8 °C	1,600	In Lab	
Vitamin D (25-Hydroxy vitamin D total)(NHS)	C163	1 day	Chemiluminescent microparticle immunoassay (CMIA)	≥ 30 ng/ml	Serum 1 ml	Sample stability : 8 hours at 18 -25 C , 4 days at 2 -8 C , 4 weeks at -20 C .	1,100	In Lab	/

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Vitamin D Level (1,25-Dihydroxy Vitamin D3)(Mayo)	C161	13 days	LC-MS/MS	Males: <16 years: 24-86 pg/mL > or =16 years: 18-64 pg/mL Females: <16 years: 24-86 pg/mL > or =16 years: 18-78 pg/mL	Serum 2 ml (protected from light)	Frozen (Stability 28 days)	12,000	Out Lab	
Vitamin D2/D3 (25-OH Vit D2/D3)(LC-MS/MS)	S074	within 3 days	Liquid chromatography tandem-mass spectrometry(LC-MS/MS)	<20 ug/L : Vitamin D deficiency 20-29 ug/L : Vitamin D insufficiency ≥30 ug/L : Vitamin D Sufficiency >150 ug/L : Vitamin D Toxicity**	Serum 1 mL	Store at 2-8 °C	3,000	In Lab	/
Vitamin E (HPLC)	S006	within 7 days	HPLC	3.45-18.09 mg/L	Serum 1 ml	Light protected at 2-8 °C	1,000	In Lab	/
VLDL-Cholesterol (BGH)	C064	1 day	Calculated : Triglyceride/5 Triglyceride : Enzymatic colorimetric test.	ไม่ระบุ	serum 1 ml	2-8 °C	100	In Lab	
VMA (BRIA)	N475	5 days	column chromatography	1 -11 mg/day	24 Hr Urine (preserved by 30 ml of 6N HCL) 10 - 50 ml	2-8 °C	775	Out Lab	
VMA(Chula)	N984	21 days	HPLC		24 Hr Urine (preserved by 30 ml of 6N HCl) 50 ml , minimum volume 5 ml	2-8 °C	800	Out Lab	
VMA, HVA, 5-HIAA, Urine-HPLC (24-h Urine)	S206	within 10 days	HPLC	1.Vanillylmandelic Acid(VMA)=1.60-7.30 mg/24h 2.Homovanillic Acid (HVA)=1.82-6.92 mg/24h 3.5-Hydroxyindoleacetic Acid (5-HIAA)=2.00-8.00 mg/24h	24 hr urine 10-20 mL . Preservative :Hydrochloric acid Record total volumn.	Store at 2-8 °C .	2,850	In Lab	/
Volatile organic compounds(GC/MS)(Siriraj)	V751	5 days	GC-MS	N/A	Gastric contents 20 ml	2-8 °C	1,500	Out Lab	
Voltage-Gated Calcium Channel (VGCC) Antibody(Questdiagnostics)	C786	30 Days	Radiobinding Assay	Reference Range(s) <30 pmol/L	1 mL serum Minimum Volume 0.2 mL	Specimen Stability Room temperature: 48 hours Refrigerated: 7 days Frozen: 35 days	46,000	Out Lab	
von Hippel-Lindau gene Mutation(VHL)	B320	30 days	Polymerase chain reaction (PCR)		EDTA whole blood 6-10 ml	2-8 °C	18,000	Out Lab	
Von Hippel-Lindau Syndrome (LMGG)	MM068	30 days			EDTA blood 6 ml	4 °C	10,220	Out Lab	
Von hippel lindau(LMGG)	MM792	30 days	Sanger		EDTA blood 6 ml.	2-8 °C	10,300	Out Lab	
von Willebrand Factor (Siriraj Hospital)	A745	11 days	ELISA	N/A	Citrate plasma 1 ml x 3 tubes	Freeze	2,200	Out Lab	
von Willebrand Factor (vWfAg RiCof CBA)(Chula)	K350	18 days	ELISA		Na Citrate plasma 1 ml x 3 tubes	Freeze	2,700	Out Lab	
Von Willebrand Factor(vWf) Ag (Siriraj)	A633	11 days	ELISA	N/A	Citrate plasma 1 ml	Freeze	750	Out Lab	
Voriconazole level (Rama)	V136	7 Days	LC/MS/MS		Clotted blood 3-5 ml. or Serum 1 ml or NaF blood 2 ml.	2-8 °C	1,350	Out Lab	
Voriconazole level (Siriraj Hospital)	V112	9 Days	Ultra Performance Liquid Chromatography (UPLC)	1.00-5.50 ug/mL	Lithium heparine 3-5 ml. or Plasma 1-1.5 ml.	2-8 °C	1,500	Out Lab	
VTM for Enterovirus 1 tube (NIH)	H023	30 Days			-	-	50	Out Lab	
VTM for Influenza virus 1 tube (NIH)	H024	30 Days			-	-	220	Out Lab	
VZV DNA Detection [Siriraj]	H191	14 Days	Real-time PCR		Body Fluid, CSF, Sputum, BAL	2-8 °C	2,900	Out Lab	
VZV DNA Quantitative (King Chulalongkorn Memorial Hospital)	H065	11 days	real time PCR		CSF 1 ml or urine 1 ml or EDTA whole blood 3 ml or EDTA plasma	2-8 °C	2,530	Out Lab	
Water analysis by ICP [Reference toxico]	V010	21 days	ICP method		Water sample 1 Liter + conc. Nitric 1 ml	2-8 °C	3,130	Out Lab	
Water analysis for Legionella (AMARC)	E634	9 days	Parameter		2 L/sample	2-8 °C	2,600	Out Lab	
Weight Sensor (Rapport/Genosense)	B621	35 days	SNPs		Buccal swap in special kit	Room Temperature	21,420	Out Lab	
Weil Felix Test	P210	1 day	Agglutination		serum 1 ml	2-8 °C for 2 days and freeze for 7 days.	100	In Lab	
West Nile Virus PCR (King Chulalongkorn Memorial Hospital)	N667	7 days	Real time PCR		CSF or serum or EDTA plasma 1 ml	2-8 °C	1,730	Out Lab	
West Nile Virus PCR [BML]	M357	3 days	Real-time RT-PCR for WNV 5'UTR region		1. EDTA plasma or serum 1 mL 2. CSF 0.5 mL 3. Urine 15 ml (Added 31-07-2019)	2-8°C (Separate plasma within 6 hours of collection)	1,800	In Lab	
Wet Preparation Genital swab	D080	1 day	Microscopic examination (0.9 % NaCl and 40% KOH SOLUTION)		Vagina swab in sterile container	Room temperature	65	In Lab	
Wet Preparation(Non Genital)	D350	1 day	Microscopic examination	-	Body Fluid or swab in sterile NSS	2-8 °C	65	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Whole Exome Sequencing (Chula)	MM975	6 Months	Next Generation Sequencing (NGS)		EDTA Whole Blood 3 ml	Room temperature	52,500	Out Lab	
Whole Exome Sequencing (WES)(Atgenes)	MM773	10 weeks	Whole Exome Sequencing		EDTA Whole blood 6 ml	Room temperature	70,100	Out Lab	
Whole Genome Amplification (WGA)(BML)	MM119	1 Days	Whole genome amplification (นำยา Sureplex by Illumina)		Embryo biopsy from day3 (blastomere) or day5 (trophoctoderm) in 2.5ul of 1%PVP.1xPBS	-20 celcius	16,675	In Lab	
Whole Mitochondial Genome sequencing [Chula]	M992	84 Days	sequencing		EDTA 3 ml	2-8 °C	16,000	Out Lab	
Widal Agglutination	P225	1 day	Agglutination		serum 1 ml	2-8 °C	120	In Lab	/
Wilson Disease Mutation(Siriraj Hospital)	B380	6 months	mutation screening test by denaturing high-performance liquid chromatography (DHPLC) and direct DNA sequencing		EDTA whole blood 6-10 ml	2 - 8 oC	18,000	Out Lab	
X-linked retinoschisis (RS1)(LMGG)	MM963	60 days	Next Generation Sequencing of retinoschisin (RS1) gene		EDTA blood 6 ml	2-8 °C	18,125	Out Lab	
Xmn I Polymorphism for thalassemia [BML]	M433	14 Days	PCR and direct sequencing for HBG2 c.-211 C>T or -158C>T or XmnI polymorphism		3-5 mL EDTA Blood + แขนงผล Hb typing	Room temperature (1 day), 2-8°C (1 month)	3,120	In Lab	
Xylene (2, 3 and 4-Methylhippuric acid) (HPLC)	S017	within 7 days (except checkup group)	HPLC	0.000 - 1.500 g/g creatinine (ACGIH2020)	Random Urine 10-20 mL.(End of shift)	Store at 2-8 °C	400	In Lab	/
Xylene (3-and 4-Xylene) in Blood (HS-GC-MS)	S105	within 5 days(except checkup group)	GC-MS	<3.00 mg/L	NaF or EDTA whole Blood 2 mL.	Store at 2-8 °C	550	In Lab	/
Xylene(Ramathibodi Hospital)	V627	7 days	HPLC-DAD	<= 1.5 g/g creatinine (ACGIH 2014)	urine 50 ml (end of shift)	2-8 °C	460	Out Lab	
Y Chromosome microdeletion (AZFa, AZFb and AZFc) [BML]	M008	7 Days	Multiplex Real-time PCR		EDTA whole blood 3 ml with semen analysis result (sperm count)	Room temperature 24 hours 2-8oC 1 month	6,075	In Lab	
Y chromosome microdeletion screening(NGG)	MM699	16 days	Fluorescent PCR		EDTA Blood 3-5 ml in Special Kit	RoomTemperature	14,000	Out Lab	
Zika Dengue and Chikungunya virus multiplex PCR(ZIKA-Trio)	M514	3 days	Multiplex real-time RT-PCR for Dengue (3'UTR), Chikungunya (NSP1) and Zika (Envelope)		EDTA Plasma or Serum 1 mL **URINE IS NOT ACCEPTABLE**	2-8 °C	4,500	In Lab	
Zika IgG (Ramathibodi Hospital)	N352	11 Days	ELISA		serum 1 ml	2-8 °C	1,375	Out Lab	
Zika IgM (Ramathibodi Hospital)	N353	11 Days	ELISA		serum 1 ml	2-8 °C	1,650	Out Lab	
Zika virus PCR [BML]	M251	3 days	Real-time RT-PCR (Taqman probe) for Zika virus env gene		1. within 7 days after on-set: EDTA Blood or Clotted Blood 3-5 mL, First stream urine 15 mL 2. within 7 days to 1 month after on-set : First stream urine 15 mL 3. Pregnancy woman : EDTA Blood or Clotted Blood 3-5 mL, First stream urine 15 mL	2-8°C	2,300	In Lab	/
Zinc (Blood)(BOMC)	V630	21 days		Normal person : 70-170 ug/dL , Exposed person : < 250 ug/dL	serum 2 ml in plastic tube (rubber tube-top is not recommended)	2-8 °C	500	Out Lab	
Zinc in Blood (ICP-MS)	S055	within 5 days (except check up group maybe longer)	ICP-MS	551.00 - 925.00 ug/L Forensic Science International 153(2005)39-44.	EDTA plasma 1mL.**,**	Store at 2-8 °C	500	In Lab	/
Zinc in Urine (ICP-MS)	S285	within 7 days (except check up group maybe longer)	ICP-MS	44.00 - 499.00 ug/L Forensic Science International 153(2005)39-44	Random Urine 5-10 mL .	Store at 2-8 °C	480	In Lab	/
Zinc Protoporphyrin (Rama)	V561	5 days	Hematofluorometry	17-77 ug/dl RBC	EDTA whole blood 3 ml , protected from light	2-8 °C	380	Out Lab	
Zonulin (BioStem)	C849	23 days	ELISA		Stool in special kit	2-8 °C	6,075	Out Lab	
Pathology Diagnostic Center									
Special stain per test [Hitech]	G006	9 days	SPECIAL STAIN		Tissue paraffin block.	Room temp .	570	Out Lab	
Fluid cytology + cell block (SVH pathology)	G061	9 days	cytology	-	CSF or Fluid 2 ml	- CSF :room temp (Stability 8 hrs) - Fluid ปื่นๆ ปื่น pleural , Ascitic : 2-8 °C	3750.00	Out Lab	
(For Package) PAP Smear(Thin Preparation)	G081	3-5 days	Liquid base cytology		Cervical specimen in Thinprep container	Room temp	600	In Lab	
PAP smear , Thin Preparation(Package2)	G082	3-5 days	Liquid base cytology		Cervical specimen in Thinprep container	Room temp	520	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Biopsy or specimen more than 5 cm [Hitech]	G502	5 days	H&E STAIN		Histology specimen in 10% Formalin	Room temp	2,570	Out Lab	
Organ with node dissection [Hitech]	G503	N/A	H&E STAIN		.	.	3,150	Out Lab	
Non-Gyn cytology [Hitech]	G505	5 Days	Non GYN Cytology method		Non-GYN cytology fluid or fixed smeared slide 1-8 slides	-Body fluid in 2-4 °C (stability 5 days) - Fixed smeared slide 1-8 slides in RT -Urine	1400.00	Out Lab	
Special stain per test [Hitech]	G506	9 days	Special stain		Tissue in paraffin block with pathology report	Room temp	570	Out Lab	
Second opinion/consultation [Hitech]	G507	N/A	H&E STAIN		.	.	2,650	Out Lab	
IHC package (6 antibody) [Hitech]	G508	5 days	IHC method		Tissue in paraffin block with pathology report	.	8,150	Out Lab	
IHC package (7-12 antibody) [Hitech]	G509	9 days	IHC method		Tissue in paraffin block with pathology report	Room temp	16,250	Out Lab	
HER-2 gene [Chula]	G512	16 days	FISH method		tissue in parafin block	Room temp	10,700	Out Lab	
Bone Marrow Clot Biopsy [SVH pathology]	G513	9 days	H&E STAIN	-	Zenker solution fixed specimen	room temp	5,600	Out Lab	
Bone Marrow Clot Biopsy+Slide Smear [SVH pathology]	G514	9 days	H&E STAIN	-	Zenker solution fixed specimen / air dried smear slide	room temp	5,500	Out Lab	
Bone Marrow Core+Clot+Slide Smear [SVH pathology]	G515	9 days	H&E STAIN	-	Zenker solution fixed specimen / air dried smear slide	room temp	6,000	Out Lab	
Bone Marrow Biopsy [SVH]	G516	9 days	H&E STAIN		Bone marrow	Room temp	6,300	Out Lab	
Flow Cytometry [SVH pathology]	G517	7 days (case BMC 2 days)	IHC method	-	EDTA Bone marrow / blood or Heparin, Pleural Fluid, CSF 5 ml in sterile container	CSF:room temp Pleural Fluid: 2-8 °C EDTA Bone marrow / blood: 2-8 °C	8,000	Out Lab	
Immunohistochemistry [SVH pathology]	G518	9 days	IHC method	-	paraffin block tissue/ 10% formalin fixed specimen	room temp	2,500	Out Lab	
Lymph Node Biopsy [SVH pathology]	G519	9 days	H&E STAIN	-	10% formalin fixed specimenne	room temp	4,500	Out Lab	
Lymph Node Biopsy +Slide Imprint Lymph Node [SVH patho]	G520	9 days	Lymph node imprint		10% formalin fixed specimenne / air dried imprint slide	room temp	6,700	Out Lab	
Slide Imprinted Lymph Node [SVH pathology]	G521	7 days	Lymph node imprint	-	Air dried imprint slide	room temp	2,200	Out Lab	
Slide Smear Bone Marrow [SVH pathology]	G522	9 days	H&E STAIN	-	Air dried smear slide	room temp	1,200	Out Lab	
Special Stain [SVH pathology]	G523	9 days	Special stain	-	paraffin block tissue/ 10% formalin fixed specimen	room temp	800	Out Lab	
EGFR (L858R mutation at exon 21) [chula]	G525	16 days	Gene sequencing	-	tissue in parafin block	room temp	7,480	Out Lab	
BK virus in situ hybridization (Rama)	G526	7 days	In situ hybridization (ISH)		tissue in parafin block	room temp	4,900	Out Lab	
Clonal rearrangement Ig heavy chain gene	G530	N/A				0	12,300	Out Lab	
Additional IHC for hematologic malignancy (Pathology Diagnostic Center)	G532	7 days	IHC method		Parafin block	Room temp	11,200	Out Lab	
Bone Marrow Clot Biopsy (Pathology Diagnostic Center)	G533	5 days	H&E STAIN		Bone marrow	Room temp	2,100	Out Lab	
Bone Marrow Core Biopsy (Pathology Diagnostic Center)	G534	5 days	H&E STAIN		Bone marrow	Room temp	2,380	Out Lab	
H-E Patho lab 1 bottle	G535	7 days	H&E STAIN		Formalin fixed specimen	Room temp	1,050	Out Lab	
H-E Patho lab 2 bottles	G536	7 days	H&E STAIN		Formalin fixed specimen	Room temp	1,580	Out Lab	
H-E Patho lab 3 bottles	G537	7 days	H&E STAIN		Formalin fixed specimen	Room temp	1,960	Out Lab	
H-E Patho lab 4 bottles	G538	7 days	H&E STAIN		Formalin fixed specimen	Room temp	2,600	Out Lab	
H-E Patho lab, Liver biopsy	G539	12 days	H&E STAIN		Formalin fixed specimen	Room temp	2,550	Out Lab	
H-E Patho lab, Large specimen over 5 cm	G540	12 days	H&E STAIN		Formalin fixed specimen	Room temp	2,400	Out Lab	
H-E Patho lab, Special stain	G541	12 days	SPECIAL STAIN		Tissue paraffin block.	Room temp	450	Out Lab	
H-E Patho lab, Immuno stain 3 antibodies for CA Breast	G542	12 days	Immunohistochemical stain		Tissue paraffin block.	Room temp	5,600	Out Lab	
Lymph Node Biopsy (Pathology Diagnostic Center)	G555	5 days	H&E STAIN		Lymph node biopsy	Room temp.	1,820	Out Lab	
Lymph Node Biopsy + Immuno stain (Pathology Diagnostic Center)	G556	10 days	H&E STAIN		Lymph node biopsy	Room temp	9,700	Out Lab	
Skin biopsy Direct Immunofluoresce IgM (DIF IgM) [Afrim]	G561	11 days	DIF		Tissue in Micheal's transport media	room temp	1,140	Out Lab	
Skin biopsy Direct Immunofluoresce IgA (DIF IgA) [Afrim]	G562	11 days	DIF	N/A	Tissue in Micheal's transport media	room temp	1,140	Out Lab	
Skin biopsy Direct Immunofluoresce Fibrinogen (DIF Fibrinogen) [Afrim]	G563	11 days	DIF		Tissue in Micheal's transport media	room temp	1,140	Out Lab	
Skin biopsy Direct Immunofluoresce IgG (DIF IgG) [Afrim]	G564	11 days	DIF		Tissue in Micheal's transport media	room temp	1,140	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Skin biopsy Direct Immunofluoresce C3 (DIF C3) [Afrim]	G565	11 days	DIF		Tissue in Micheal's transport media	room temp	1,140	Out Lab	
Thyroid Cancer Mutation Panel (BRAF, RAS, RET/PTC, PAX8/PPAR (Quest Diagnostics)	G634	14 Days	1. The BRAF assay is an allelic -specific PCR 2. The RET/PTC and PAX8/PPAR gamma are real time reverse transcriptase PCR assays	N/A	1. Standard: 4 slides and 2. Needle washings : Needle washings in alcohol based fixative (e.g. cytolyt), 4 slides, or Formalin fixed, paraffin embedded tissue block FNA or FFPE specimens are acceptable for the assay.	1. Room temperature: Indefinite or 2. Refrigerated: Indefinite **Do Not Freeze **	120,000	Out Lab	
RT-PCR for TB (Pathology Diagnostic Center)	G640	19 Days	Real Time PCR		1. FFPE tissue, paraffin block+ Attach Pathology Report	Room temp.	3,200	Out Lab	
MI Profile™ Multi-platform, solid tumor biomarker analysis (Caris Life Sciences)	G642	21 Days	Multi plateform analysis : Next Gen SEG, IHC, FISH, CISH		Formalin-fixed, paraffin-embedded (FFPE) cancer tissue block packing in CARIS shipper kit	Room temp	309,290	Out Lab	
Service charge for H&E slide per Block & Slide (H-E Patho)	G650	7 Days			N/A	N/A	480	Out Lab	
Fluid cytology (Conventional method)	G655	5 days	Conventional method cytopathology.		Fresh body fluid or 95% Ethanol-fixed-smears slides.	-Fresh body fluid in 2-4 c -95% Ethanol-fixed-smears slides in RT.	750.00	In Lab	
KRAS Mutations Cobas®(CE-IVD)(Chula GenePro)	G662	18 days			Tissue in paraffin block + H&E slide + Pathology report	room temp	7,950	Out Lab	
Impression cytology(Siriraj)	G663	10 days			Take a piece of paper that the cells are put in a container. (Plastic or glass) with a fixative consisting of glacial acetic acid 37% volume 5ml. Formaldehyde volume 5ml., And 70% ethyl alcohol volume of 100 ml.	2-8 oC	1,770	Out Lab	
PD-L1 (B7-H1, CD274), Semi-Quantitative Immunohistochemistry (MAYO)	G664	23 days	Immunohistochemistry on sections of paraffin-embedded tissue using Ventana PD-L1 clone SP263.(Unpublished Mayo method)		Formalin-fixed, paraffin-embedded tissue block; or 3 unstained glass, "positively charged" slides with 4-microns formalin-fixed, paraffin-embedded tissue	Room temp	25,000	Out Lab	
Biopsy express (Pathology Diagnostic Center)	G669	3 days			-	Room Temp	2,250	Out Lab	
T-cell receptor gene rearrangement (Chula)	G670	12 days	PCR		FFPE tumor tissue + H&E slide + Pathology report	Room temp	30,130	Out Lab	
Bone marrow aspirate smear (Pathology Diagnostic Center)	G677	5 days			Bone marrow aspirate smear	Room temp	1,260	Out Lab	
Peripheral blood smear (Pathology Diagnostic Center)	G678	5 days			Peripheral blood smear	Room temp	600	Out Lab	
Fine needle aspiration (FNA) ตั้งแค่น้ำมันที่5เป็นต้นไป(แผนละ) (Pathology Diagnostic Center)	G679	5 days			Slide Fine needle aspiration (FNA) fixed 95% alcohol	Room temp	250	Out Lab	
Lymph node, dissection for staging (per container) (Pathology Diagnostic Center)	G680	5 days			Formalin fixed specimen	Room temp	840	Out Lab	
Thyroidectomy with node dissection (Pathology Diagnostic Center)	G681	5 days			Formalin fixed specimen	Room temp	3,600	Out Lab	
Thyroid, total or subtotal thyroidectomy (Pathology Diagnostic Center)	G682	5 days			Formalin fixed specimen	Room temp	2,520	Out Lab	
Thyroid, lobectomy (unilateral) (Pathology Diagnostic Center)	G683	5 days			Formalin fixed specimen	Room temp	1,960	Out Lab	
Salivary gland (Parotid, submandibular) (Pathology Diagnostic Center)	G684	5 days			Formalin fixed specimen	Room temp	1,960	Out Lab	
Adenoid tissue, resection (Pathology Diagnostic Center)	G685	5 days			Formalin fixed specimen	Room temp	700	Out Lab	
Tonsil, tonsilectomy (per side) (Pathology Diagnostic Center)	G686	5 days			Formalin fixed specimen	Room temp	700	Out Lab	
Oral cavity, mass, excision (size <5 cm) (Pathology Diagnostic Center)	G687	5 days			Formalin fixed specimen	Room temp	1,120	Out Lab	
Nasal polyp, polypectomy (Pathology Diagnostic Center)	G688	5 days			Formalin fixed specimen	Room temp	840	Out Lab	
ENT incisional biopsy (Pathology Diagnostic Center)	G689	5 days			Formalin fixed specimen (oral cavity, tonsil, nasal cavity, nasopharynx, larvnx and etc.)	Room temp	840	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
FISH for ROS1 gene translocation (Pathology Diagnostic Center)	G690	9 days	FISH		Formalin-fixed paraffin-embedded tissue	Room temperature	25,200	Out Lab	
ImmunoHisto-ACTH(slide)	G701	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp	620	In Lab	
ImmunoHisto-Aromatase (slide)	G707	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp	680	In Lab	
ImmunoHisto-AT (slide)	G708	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp	470	In Lab	
Bone marrow core biopsy and clot (Pathology Diagnostic Center)	G740	5 days			Bone marrow	Room temp	2,240	Out Lab	
Bone marrow clot and core biopsy (Hi-tech)	G741	9 days			Bone marrow	Room temp	1,250	Out Lab	
ImmunoHisto-PD-L1 (22C3) (Chula)	G744	14 Days	PD-L1 IHC 22C3 pharmDx contains the optimized reagents and protocol required to complete an IHC staining procedure of FFPE specimens using Autostainer Link 48. Following incubation with the primary monoclonal antibody to PD-L1 or the Negative Control Reagent (NCR), specimens are incubated with a Linker antibody specific to the host species of the primary antibody, and then are incubated with a ready-to-use visualization reagent consisting of secondary antibody molecules and horseradish peroxidase molecules coupled to a dextran polymer backbone. The enzymatic conversion of the subsequently added chromogen results in precipitation of a visible reaction product at the site of antigen. The color of the chromogenic reaction is modified by a chromogen enhancement reagent. The specimen may then be counterstained and coverslipped. Results are interpreted using a light microscope.		FFPE tumor tissue with primary histopathology report or unstained slide 3 slides.(Using adhesive glass slide)	room temp.	10,000	Out Lab	
PD-L1 (DAKO 28-8) IHC (Chula)	G745	15 Days	PD-L1 IHC 28-8 pharmDx contains optimized reagents and protocol required to complete an IHC staining procedure of FFPE specimens using Autostainer Link 48 and PT Link Pre-treatment Module (6). Following incubation with the primary monoclonal antibody to PD-L1 or the Negative Control Reagent (NCR), specimens are incubated with a linker antibody specific to the host species of the primary antibody, and then are incubated with a ready-to-use visualization reagent consisting of secondary antibody molecules and horseradish peroxidase molecules coupled to a dextran polymer backbone. The enzymatic conversion of the subsequently added chromogen results in precipitation of a visible reaction product at the site of the antigen. The color of the chromogenic reaction is modified by a chromogen enhancement reagent. The specimen may then be counterstained and coverslipped. Results are interpreted using a light microscope. Control Slides containing two formalin-fixed, paraffin-embedded human cell lines are provided to validate staining runs.		Tissue block or 1 H&E slide and 3 unstained slides with primary histopathology report	Room temp	6,875	Out Lab	
Biopsy or specimen more than 10 cm [Hi-tech]	G748	9 days			Formalin fixed specimen	Room temp	4,200	Out Lab	
HPV Genotyping in Urine (HybriBio, 21 HPV GenoArray)(SNH)	G856	9 days	HybriBio, 21 HPV GenoArray Diagnostic		Urine over 10 mL in special kit	Room temp	1,560	In Lab	
Immunohistochem ALK D5F3 (Chula GenePro)	G857	9 days			Slide H&E 1 slide and Unstain 2 slides	Room temp	3,500	Out Lab	
HPV HybriBio 21 Genoarray test (PathText container)	G900	7 days	HybriBio, 21 HPV GenoArray Diagnostic		Cervical specimen in Liquid Base Cytology container	Room temp	1,650	In Lab	
HPV HybriBio 21 Genoarray test (LiquidPrep container)	G901	7 days	HybriBio, 21 HPV GenoArray Diagnostic		Cervical specimen in Liquid Base Cytology container	Room temp	1,650	In Lab	
FISH for Ewing sarcoma gene (EWSR1 FISH) (IOP)	G949	18 days	FISH		Formalin fixed specimen or Fresh specimen in specific media(RNALater) for 2 days	Room temp for Formalin fixed specimen 15 - 25 °C for Fresh specimen in specific media(RNALater)	5,000	Out Lab	
Prostate cancer screening test (CEC/CTC)	G950	5 work-days	1. Separate cells from whole blood by hMx separation technique 2. Fix cells on slide by cryo fixation technique 3. Characterize cells by Cryoimmunostaining technique with fluorescein 4. Identify and analyze cells by Fluorescence Microscopy	Cell morphology analysis Class I and II are negative for malignancy Class III, IV and V are risk for malignancy	Heparinized Blood 8-10 mL.	Room temperature in the dark, 48 hrs	23,800	Out Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
HER-2 FISH (IOP)	G952	11 Days	Fluorescence in situ hybridization technique		H&E slide + FFPE tissue + pathology report	Room temperature	12,500	Out Lab	
Synovial FISH (IOP)	G953	9 Days	Fluorescence in situ hybridization technique		H&E slide + FFPE tissue + pathology report	Room temperature	5,000	Out Lab	
ALK FISH (IOP)	G954	9 Days	Fluorescence in situ hybridization technique		H&E slide + FFPE tissue + pathology report	Room temperature	18,750	Out Lab	
Kidney biopsy,light microscopy (RAMA)	G960	16 days	1. EM: Place the allocated core/portion for Electron Microscopy into vial of 2.5% buffered glutaraldehyde. The thickness of the tissue should not exceed 2-3 mm. Do not dice into multiple small fragments. 2. LM: The allocated core/portion for light microscopy have to be placed into vial of Glyo-Fixx. 3. IF: a. Place specimen on aluminum foil. b. Cover with optimal cutting temperature (OCT) compound. c. Wrap in aluminum foil. d. Quick freeze. e. Send specimen frozen on dry ice.		A minimum of 1 biopsy cores that contain cortex/glomeruli (If send for EM, LM and IF, A minimum of sample should be 3 biopsy cores) - Light Microscopy (LM): Fix immediately in Glyo-Fixx at room temperature. 1. Electron Microscopy (EM): Fix immediately in 2.5% buffered glutaraldehyde at 4 °C 2. Immunofluorescent Histology (IF): Keep on dry ice.)	LM: Keep at room temperature (EM: Keep at 4 °C , IF: Keep on dry ice)	950	Out Lab	
MI Tumor Seek™ plus PD-L1 (Caris Life Sciences)	G969	23 Days	Next-Generation Sequencing (NGS) : Solid tumour, 45-gene sequencing profile including PD-L1		Formalin-fixed, paraffin-embedded (FFPE) cancer tissue block in CARIS shipper kit sending with requisition form	Room temp	186,200	Out Lab	
MI Tumor Seek™ plus PD-L1 and MMR (Caris Life Sciences)	G970	23 Days	Next-Generation Sequencing (NGS) : Solid tumour, 45-gene sequencing profile including PD-L2 and MMR		Formalin-fixed, paraffin-embedded (FFPE) cancer tissue block in CARIS shipper kit sending with requisition form	Room temp	196,000	Out Lab	
MI Tumor Seek™(Caris Life Sciences)	G971	23 Days	Next-Generation Sequencing (NGS) : Solid tumor, 45-gene sequencing profile		Formalin-fixed, paraffin-embedded (FFPE) cancer tissue block in CARIS shipper kit sending with requisition form	Room temp	176,400	Out Lab	
HER-2 DISH [Hitech]	G972	20 days	Dual in situ hybridization (DISH)		Paraffin block	Room temp	15,000	Out Lab	
FISH For MDM2 gene Amplification [RAMA]	G973	16 Days	FISH		- Formalin-fixed, paraffin-embedded (FFPE) tissue block that suspect positive for carcinoma cells - H&E slide + Pathology report for Pathologist review	Room temperature and avoid heat	8,375	Out Lab	
GYN HPV HybriBio 21 Genoarray	GH146	7 days	HybriBio, 21 HPV GenoArray Diagnostic		Cervical specimen in Liquid Base Cytology container	Room temp	1,650	In Lab	
HPV DNA HybridCapture2 primary screening reflex cytology(LBC method)	GH246	7 days for HPV testing and within 5 days for reflex PAP test(after report positive for high risk HPV)	HPV : HPV DNA HybridCapture2 testing if positive for high risk type HPV, reflex cytology PAP smear LBC method.		Cervical specimen in Liquid base medium : SurePath, Pathtest or Liqui-prep media.	Room Temp.	1,000	In Lab	
HPV Genotype HybriBio primary screening reflex cytology(LBC method)	GH247	7 days for HPV testing & within 5 days for reflex PAP test(after report positive for high risk HPV)	HPV : HPV Genotype HybriBio21 Genoarray testing if positive for high risk type HPV, reflex cytology PAP smear LBC method.		Cervical specimen in Liquid base medium : SurePath, Pathtest or Liqui-prep media.	Room Temp.	1,000	In Lab	
HPV DNA HybridCapture2 primary screening reflex cytology(conventional method)	GH248	7 days for HPV testing & within 5 days for reflex PAP test(after report positive for high risk HPV)	HPV: HPV DNA HybridCapture2 testing if positive for high risk type HPV, reflex cytology PAP smear conventional method.		1. 95% Fixed Cervical smear slide and 2. Cervical swab specimen in Digene HC2 COL DEVICE	Room Temp.	900	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
HPV Genotype Hybridio primary screening reflex cytology(conventional method)	GH249	7 days for HPV testing & within 5 days for reflex PAP test(after report positive for high risk HPV)	HPV: HPV Genotype Hybridio21 Genoarray testing if positive for high risk type HPV, reflex cytology PAP smear conventional method.		1. 95% Fixed Cervical smear slide and 2. Cervical swab specimen in Digene HC2 COL DEVICE	Room Temp.	900	In Lab	
GYN HPV DNA Aptima (mRNA)	GH311	10 days	APTIMA HPV Assay with PANTHER system		Cervical specimens collected in PreservCyt Solution / 2-5 ml	Cervical specimens collected in PreservCyt Solution stored at 2-30°C for up to 30 days after the date of collection.	2,250	In Lab	
GYN HPV DNA Cobas(16/18 and 12 other high risk)	GH312	9 Days	Realtime Multiplex PCR	LOD 100-2400 copies/mL	Cervical smear in preservative container.	Room Temp	1,500	In Lab	
CoTest ThinPrep plus HPV Aptima (mRNA) and Hybridio 21 Genoarray	GH652	10 days	N/A		Cervical smear in preservative container	Room temp.	3,000	In Lab	
Urine HPV, Hybridio21Genoarray	GH856	9 days	Hybridio, 21 HPV GenoArray Diagnostic		Urine over 10 mL in special kit	Room temp	1,560	In Lab	
Service charge for H&E 1-2 slide (ค่าขอสไลด์)	R015	3-5 days	H&E		paraffin block	Room Temp	50	In Lab	
Service charge for H&E slide 3-6 slide (ค่าขอสไลด์)	R016	3-5 days	H&E		paraffin block	Room Temp	300	In Lab	
Service charge for H&E slide 7-15 slide (ค่าขอสไลด์)	R017	3-5 days	H&E		paraffin block	Room Temp	600	In Lab	
Service charge for H&E slide 16 and more slide (ค่าขอสไลด์)	R018	3-5 days	H&E		paraffin block	Room Temp	1,000	In Lab	
ImmunoHisto-PAX-5	R019	7 days	IHC		Paraffin block with tumor cells	Room Temp	1,500	In Lab	
In situ hybridization for EBER	R021	10 days	In situ hybridization (ISH) without RNA+ control		Paraffin block หรือ Immuno unstained Slides x 2	Room Temp	3,600	In Lab	
In situ hybridization for CMV (RAMA)	R022	9 days	In situ hybridization (ISH)		Paraffin block Or Immuno unstained Slides x 2	room temperature	4,900	Out Lab	
Specimen preparation for ACT Test	R023	1-2 day	1. 5 unstained slides (Uncharged Slide) 2. HE stain slide with pathology report		FFPE Block	RT	600	In Lab	
Tonsil, each specimen	R025	5 days	Histopathology and H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
ImmunoHisto-PD-L1 (SP142)	R026	5 days	VENTANA PD-L1 (SP142) Assay is a qualitative immunohistochemical assay using rabbit monoclonal anti-PD-L1 clone SP142 intended for use in the assessment of the PD-L1 protein in formalin-fixed, paraffin-embedded (FFPE) urothelial carcinoma and non-small cell lung cancer (NSCLC) tissue stained with OptiView DAB IHC Detection Kit and OptiView Amplification Kit on a VENTANA BenchMark ULTRA instrument. Determination of PD-L1 status is indication-specific, and evaluation is based on either the proportion of tumor area occupied by PD-L1 expressing tumor-infiltrating immune cells (% IC) of any intensity or the percentage of PD-L1 expressing tumor cells (% TC) of any intensity. PD-L1 expression in ? 5% IC determined by VENTANA PD-L1 (SP142) Assay in urothelial carcinoma tissue is associated with increased objective response rate (ORR) in a non-randomized study of TECENTRIQ? (atezolizumab). PD-L1 expression in ? 50% TC or ? 10% IC determined by VENTANA PD-L1 (SP142) Assay in NSCLC tissue may be associated with enhanced overall survival from TECENTRIQ (atezolizumab).		FFPE tumor tissue with primary histopathology report.	RT.	6,000	In Lab	
Mandible, mandibulectomy	R028	7 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Anal fissure- fistula in ano	R330	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Appendix	R332	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Breast, biopsy, less than 2 cm.	R334	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Breast, excision, less than 5 cm	R335	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Cervix, biopsy	R338	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Colon, biopsy	R340	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Duodenum, biopsy	R342	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Endocervical curettings	R344	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Endocervix, biopsy	R346	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Endometrium curettings	R348	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Esophagus, biopsy	R350	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Fallopian tubes (both sides), TR, TL, sterilization	R351	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Gum, biopsy	R352	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Gastric, biopsy	R353	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Larynx, biopsy	R358	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Liver, biopsy	R360	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Her2 gene (DISH)	R361	7 working days	Assessment of HER2 gene copy number was performed by the FDA-approved HER2 DISH (dual in situ hybridization) assay (Ventana) . HER2 was detected by a dinitrophenyl (DNP) labeled probe and visualized by ultraView SISH DNP (silver in situ hybridization) Detection Kit. The Chr17 centomere (CEN-17) was targeted with a digoxigenin (DIG) labeled probe and detected using ultraView Red ISH DIG Detection Kit.		Breast cancer tissue in paraffin block	Room Temp	13,500	In Lab	
Lung, biopsy	R362	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Lymph node, biopsy	R364	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Nail clippings, for fungal infection	R366	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Nasal polyps	R368	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Nasopharynx, biopsy	R370	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Oral mucosa, biopsy	R372	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Paranasal sinus mucosa	R374	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Pharynx, biopsy	R376	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Pleura, biopsy	R378	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Products of conception	R380	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Rectum, biopsy	R384	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Skin, less than 2 cm	R386	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Soft tissue mass, less than 2 cm	R388	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Subcutaneous mass, cyst, less than 2 cm	R392	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Testes, castration (both sides)	R394	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Tonsils (both sides)	R396	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,500	In Lab	
Tongue, resection	R397	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Tonsils and adenoid	R398	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Tongue, biopsy	R399	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Urinary bladder mucosa, biopsy	R400	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Vas deferens (both sides), vasectomy, sterilization	R402	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Unlisted small specimen, less than 2 cm	R406	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Bone marrow biopsy	R414	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,800	In Lab	
Spinal cord biopsy	R416	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Brain, biopsy	R418	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Brain, hematoma	R419	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Breast, simple mastectomy	R420	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,200	In Lab	
Cervix, conization	R422	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Histology stat 24 hr.(small biopsy)	R423	24 hrs	H&E STAT		Small biopsy ,Formalin fixed specimen	Room temp	6,100	In Lab	
Cervix, LEEP	R424	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Femur, head	R428	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Toe—non tumor(e.g., gangrene)	R430	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Finger—non tumor(e.g., gangrene)	R431	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Gallbladder	R432	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
อวัยวะหรือส่วนของอวัยวะที่ไม่ต้องเลาะตรวจต่อมน้ำเหลือง (CGD project)	R433	5 days	Routine histopathology (H&E stain).		Tissue in 10% Formalin.	RT	1,600	In Lab	
Heart valve	R434	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Joint	R435	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Bursa	R436	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Synovium	R437	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Myoma, from myomectomy	R442	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Ovary and fallopain tube (e.g., dermoid cyst)	R444	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Prostate—TUR specimen	R450	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Salivary gland	R452	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,400	In Lab	
Skin, excision for skin cancer, melanoma	R454	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	800	In Lab	
Soft tissue mass, 2-10 cm	R456	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Subcutaneous mass, cyst, 2-10 cm	R462	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Thyroid gland, lobectomy/each lobe	R464	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,400	In Lab	
Urinary bladder—TUR specimen	R466	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Uterus (TAH, or Vaginal Hysterectomy), for benign diseases	R468	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Unlisted medium specimen, less than 5 cm	R470	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Bone (tumor)	R472	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,800	In Lab	
Breast, mastectomy with lymph nodes	R474	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,000	In Lab	
Breast, lumpectomy for cancer	R475	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,800	In Lab	
Colon, AP resection	R476	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Colon, right or left half	R478	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Esophagus, esophagectomy	R480	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,900	In Lab	
Esophagus-stomach, esophago-gastrectomy specimen	R481	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,000	In Lab	
Enucleation of eye ball	R482	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,900	In Lab	
Kidney, nephrectomy	R484	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Larynx, laryngectomy	R486	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Leg, BK amputation	R488	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Liver, hepatectomy	R490	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Lung, lobectomy	R492	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Maxilla, maxillectomy	R496	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Mediastinal tissue, tumor resection	R498	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Lymph nodes, neck dissection	R500	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
EBER-ISH (Rama)	R501	9 days	In situ hybridization (ISH)		Paraffin block Or Immuno unstained Slides x 2	room temperature	4,320	Out Lab	
Omentum, omentectomy	R502	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Pancreas, pancreatectomy	R504	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Pancreas-duodenum-gallbladder Whipple's operation	R506	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	4,500	In Lab	
Penis, penectomy	R508	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Pleura, decortication	R510	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Prostate, radical prostatectomy	R512	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,800	In Lab	
Small intestine, resection	R514	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Stomach, gastrectomy for non cancer	R516	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Subcutaneous mass (over 10 cm)	R518	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Testis, orchidectomy for tumor	R520	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Urinary bladder, cystectomy	R522	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
ALK (D5F3) CDx (VENTANA)	R523	5 days	Automate Ventana system, IHC method.		FFPE tumor tissue with primary histopathology report.	RT.	3,500	In Lab	
Uterus, TAH for cancer	R524	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Uterus, tubes, ovaries, TAH-BSO, TAH-SO	R526	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Vulva, vulvectomy	R528	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	2,500	In Lab	
Vulva, biopsy	R529	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Unlisted large specimen, over 5 cm	R530	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,250	In Lab	
Nerve biopsy	R531	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,400	In Lab	
Leg, AK amputation	R532	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	4,500	In Lab	
Small intestine, long segment resection	R534	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,000	In Lab	
Lung, pneumonectomy	R536	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	4,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Colon, total colectomy	R540	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,200	In Lab	
Unlisted very large specimen, organ resection	R542	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,200	In Lab	
Kidney Biopsy with direct immuno.	R550	5-7 days	H&E STAIN/Direct Immunofluorescent staining		Fresh needle biopsy (with ice) and needle biopsy in Zenker's solution (RT)	Fresh needle biopsy (with ice) and needle biopsy in Zenker's solution (RT)	6,000	In Lab	
Immunofluorescent staining, direct	R552	7 days	Direct Immunofluorescent staining		skin biopsy 2 ชิ้น - 1 ชิ้น Freeze, 1 ชิ้น แช่ formalin	fresh specimen with ice	2,500	In Lab	
Slide consultation	R554	3-5 days	Slide consultation		Slide	Room temp .	1,900	In Lab	
Special histochemical stain (1 Slide)	R556	3-5 days	SPECIAL STAIN		Tissue paraffin block.	Room temp .	250	In Lab	
Breast, large excision	R688	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Radical hysterectomy	R689	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,800	In Lab	
Unlisted, specimen 10-15 cm	R690	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Consultation 4-8 Sides	R691	3-5 days	Slide consultation		Slide	Room temp .	1,900	In Lab	
Consultation 9 and more	R692	3-5 days	Slide consultation		Slide	Room temp .	2,300	In Lab	
Gastrectomy for cancer	R693	3-5 days	H&E STAIN		Formalin fixed specimen	Room temp	3,000	In Lab	
ImmunoHisto-ER	R781	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	1,500	In Lab	
ImmunoHisto-HER-2	R801	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	1,500	In Lab	
ImmunoHisto-Ki-67(MIB-1)	R816	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	1,500	In Lab	
ImmunoHisto-PR	R853	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	1,500	In Lab	
ImmunoHisto-TdT	R869	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	1,500	In Lab	
Immunohisto for 1 Antibody	R883	3 - 5 days			Tissue Paraffin block	Room temp.	1,500	In Lab	
Prostate needle biopsy with immunohisto-CK.HMW	R885	3-5 days	H&E WITH IHC STAIN		Formalin fixed specimen	Room temp	1,800	In Lab	
Specimen preparation for Molecular Pathology	R887	1 day	Tissue Steriled preparation technique		Tissue paraffin block with primary pathology report.	Room temp	600	In Lab	
Immunohistochemistry (=or<6 antibodies)	R889	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	6,000	In Lab	
Immunohisto for lymphoma panel	R890	14 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	9,300	In Lab	
Immunohisto for Extensive panel (7-12 antibodies)	R891	14 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	9,500	In Lab	
Immunohisto package for CA breast I (ER/PR/Her2)	R892	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	3,750	In Lab	
Immunohisto for CA breast II (ER/PR /Her2/Ki-67/p53)	R893	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	5,700	In Lab	
Immunohisto for MSI panel (MSH6, MSH2,PMS2,MLH1)	R894	14 days	Immunohistochemical stain		Tissue paraffin block.	room temperature	4,900	Out Lab	
Doctor stand by fee for frozen section	R900	5 days	H&E STAIN		X	X	2,000	In Lab	
Specimen preparation for PCR TB	R951	2 days	Tissue Steriled preparation technique		Tissue paraffin block with primary pathology report.	Room temp	200	In Lab	
Lip	R967	3 - 5 days	H&E		Lip Tissue in 10% formalin	Room temp	960	In Lab	
Mandible biopsy	R968	3 - 5 days	H&E		Mandible tissue in 10% formalin	Room temp	1,350	In Lab	
Maxilla biopsy	R969	3 - 5 days	H&E		Maxilla tissue in 10% formalin	Room temp	1,350	In Lab	
Maxillary sinus	R976	3 - 5 days	H&E		Maxillary tissue in 10% formalin	Room temp	960	In Lab	
Oral soft tissue	R977	3 - 5 days	H&E		Oral soft tissue in 10% formalin	Room temp	960	In Lab	
Salivary gland	R978	3 - 5 days	H&E		Salivary gland in 10% formalin	Room temp	1,170	In Lab	
Teeth	R979	3 - 5 days	H&E		Teeth in 10% formalin	Room temp	1,350	In Lab	
ImmunoHisto-Factor XIIIa	R991	7 days	IHC		Paraffin block with tumor cells	Room temp	1,500	In Lab	
CINtecPLUS Cytology (P16/Ki-67 dual stain)	R994	7 days	Automate Ventana system, ICC method.		Cervical smear in Liquid base cytology media.	RT.	2,200	In Lab	
Vagina, biopsy	RC002	5 days	H&E STAIN		Formalin fixed specimen	Room temp	750	In Lab	
Immunohisto-HPV (6,11,18)	RC007	7 days			Tissue paraffin block	Room temp	1,500	In Lab	
Immunohisto-CD45RA	RC010	7 days			Tissue paraffin block	Room temp	1,500	In Lab	
Frozen section 08.00-17.00 (Mon-Fri)	RF001	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	9,100	In Lab	
Frozen section 17.01-20.00 (Mon-Fri)	RF002	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	12,000	In Lab	
Frozen section 08.00-17.00 (Sat-Sun and Holiday)	RF003	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	11,500	In Lab	
Frozen section 17.01-20.00 (Sat-Sun and Holiday)	RF004	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	15,000	In Lab	
Service charge for frozen section with malignancy margin	RF005	N/A	Cryostat section and H&E		-	-	2,300	In Lab	
Frozen section for sentinel node (1-4 node), 08.00-17.00 (Mon-Fri)	RF006	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	9,100	In Lab	
Frozen section for sentinel node (1-4 node), 17.01-20.00 (Mon-Fri)	RF007	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	12,000	In Lab	
Frozen section for sentinel node (1-4 node), 08.00-17.00 (Sat-Sun and Holiday)	RF008	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	11,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
Frozen section for sentinel node (1-4 node), 17.01-20.00 (Sat-Sun and Holiday)	RF009	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	15,000	In Lab	
Frozen section for sentinel node (5-10 node), 17.01-20.00 (Mon-Fri)	RF011	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	14,000	In Lab	
Frozen section for sentinel node (5-10 node), 08.00-17.00 (Sat-Sun and Holiday)	RF012	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	13,300	In Lab	
Frozen section for sentinel node (5-10 node), 17.01-20.00 (Sat-Sun and Holiday)	RF013	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	17,000	In Lab	
Frozen section for sentinel node (>10 node), 08.00-17.00 (Mon-Fri)	RF014	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	14,700	In Lab	
Frozen section for sentinel node (>10 node), 17.01-20.00 (Mon-Fri)	RF015	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	17,700	In Lab	
Frozen section for sentinel node (>10 node), 08.00-17.00 (Sat-Sun and Holiday)	RF016	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	17,000	In Lab	
Frozen section for sentinel node (>10 node), 17.01-20.00 (Sat-Sun and Holiday)	RF017	30 mins	Cryostat section and H&E		Fresh specimen	On ice 2-4 °C	21,500	In Lab	
Pathologist standby fee for frozen section (cancel service < 4 hour)	RF018	N/A	Cryostat section and H&E		-	-	2,800	In Lab	
Pathologist standby fee for frozen section (1 hour/charge)	RF019	N/A	Cryostat section and H&E		-	-	1,800	In Lab	
SpecialHisto-Trichrome	RI001	7 days	Special Stain for Trichrome		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-PAS-D	RI002	7 days	Special Stain for PAS-D		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-PAS	RI003	7 days	Special Stain for PAS		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-GMS	RI004	7 days	Special Stain for GMS		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Mucin	RI005	7 days	Special Stain for Mucin		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-AFB	RI006	7 days	Special Stain for AFB		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-FITE	RI007	7 days	Special Stain for FITE		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Iron	RI008	7 days	Special Stain for Iron		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Giemsa	RI009	7 days	Special Stain for Giemsa		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Congo Red	RI010	7 days	Special Stain for Congo Red		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Jones	RI011	7 days	Special Stain for Jones		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Alcian Blue	RI012	7 days	Special Stain for Alcian Blue		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Oil Red O	RI013	7 days	Special Stain for Oil Red O		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Wright's stain	RI014	7 days	Special Stain for Wright's stain		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-H.Pylori	RI015	7 days	Special Stain for H.Pylori		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-COL iron	RI016	7 days	Special Stain for COL iron		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Bile	RI017	7 days	Special Stain for Bile		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Reticulin	RI018	7 days	Special Stain for Reticulin		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Argyrophil (Grimelius technique)	RI019	7 days	Special Stain for Argyrophil (Grimelius technique)		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Calcium	RI020	7 days	Special Stain for Calcium		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Crystal violet (for Amyloid)	RI021	7 days	Special Stain for Crystal violet (for Amyloid)		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Elastin	RI022	7 days	Special Stain for Elastin		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Fontana-Masson (for Argentaffin)	RI023	7 days	Special Stain for Fontana-Masson (for Argentaffin)		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Gram stain (Brown and Brenn)	RI024	7 days	Special Stain for Gram stain (Brown and Brenn)		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-PTAH	RI025	7 days	Special Stain for PTAH		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Toluidine blue	RI026	7 days	Special Stain for Toluidine blue		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-mAFB	RI027	7 days	Special Stain for mAFB		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Warthin-Starry	RI028	7 days	Special Stain for Warthin-Starry		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Copper (Rubeanic acid)	RI029	7 days	Special Stain for Copper (Rubeanic acid)		Tissue paraffin block.	Room temp .	250	In Lab	
SpecialHisto-Reticulin (PDC)	RI030	7 days	Special Stain for Reticulin (PDC)		Tissue paraffin block.	Room temp .	250	In Lab	
ImmunoHisto-PAX-8	RI051	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Androgen R	RI053	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Annexin A1	RI054	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Arginase-1	RI055	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-ATRX	RI056	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-B-Catenin	RI057	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-B cell hairy cell	RI058	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-BF-1	RI059	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CA 125	RI060	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CA 19-9	RI061	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
ImmunoHisto-CD2	RI062	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD7	RI063	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD19	RI064	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD25	RI065	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD38	RI066	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD44	RI067	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD61	RI068	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD123	RI069	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD163	RI070	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CDK-4	RI071	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CK KL-1	RI073	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CK-5	RI074	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CK-14	RI075	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CK-17	RI076	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CK-18	RI077	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-COX-2	RI078	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-D2-40	RI079	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-DOC-1	RI080	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-INI1	RI081	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Filamin A	RI082	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Fli-1	RI083	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-GAB-1	RI084	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Galectin-3	RI085	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-GATA-3	RI086	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-GLUT-1	RI087	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Glutamine	RI088	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Glypican 3	RI089	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HCG	RI090	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HHV8	RI091	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HNF-1	RI092	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HBME-1	RI093	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HSV type1	RI094	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HSV type1/2	RI095	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-IDH1 R132H	RI096	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Ig G4	RI097	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Inhibin	RI098	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-INT-1	RI099	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Laminin	RI100	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Langerlin	RI101	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-LCA	RI102	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Mammaglobin	RI103	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MDM2	RI104	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Mesothelin (5B2)	RI105	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MLH1	RI106	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MPO	RI107	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MSH2	RI108	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MSH6	RI109	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MUC-1	RI110	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MUC-4	RI111	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MyoD1	RI112	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-NapsinA	RI113	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-NeuN	RI114	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Osteocalcin	RI115	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Osteonectin	RI116	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Osteopontin	RI117	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Oxytocin R	RI118	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
ImmunoHisto-p40	RI119	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-p16 INK4a	RI120	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-P80 ALK (5A4)	RI121	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-P120 Catenin	RI122	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Pan.Polypeptide	RI123	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-PAX-2	RI124	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-PD-1	RI125	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-PDGFRa	RI126	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Placenta (hPL)	RI127	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-PMS2	RI128	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-RSV	RI129	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-S-100p	RI130	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-SALL4	RI131	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-SATB2	RI132	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Skele. Actin	RI133	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Smoothelin	RI134	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-SOX2	RI135	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-SOX10	RI136	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-SOX11	RI137	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-STAT6	RI138	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-SV40	RI139	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TAG-72	RI140	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TCR-Delta	RI141	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TCR-Gamma	RI142	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TFE3	RI143	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TIA-1	RI144	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TLE-1	RI145	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Tn	RI146	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Toxoplasma	RI147	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-TSH	RI148	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Ubiquitin	RI149	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Uroplakin III	RI150	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-YAP	RI151	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-DOG-1	RI152	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Actinin	RI153	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Collagen VI	RI154	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Dysferin	RI155	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Emerin	RI156	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Merosin	RI157	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Alpha-Sarcoglycan	RI158	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Beta-Sarcoglycan	RI159	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Delta-Sarcoglycan	RI160	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Gamma-Sarcoglycan	RI161	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Adenovirus	RI162	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Histone H3	RI163	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-BRAF (V600E)	RI164	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-HGAL	RI165	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-MUC-6	RI166	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-NGFR p75	RI167	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-NKX3.1	RI168	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-NUT	RI169	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Olig2	RI170	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Olig2 (CU)	RI171	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-OTX2	RI172	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Parvovirus B19	RI173	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-PD-L1 (IOP)	RI174	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	

Product Name	Code	TAT	Method	Reference Range (Unit)	Sample Type / Volume (ml)	Storage Condition	Price	In/Out Lab	ISO15189
ImmunoHisto-Somatostatin	RI175	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-CD71	RI178	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-ERG	RI179	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-H3K27M	RI181	9 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
Immunohisto for MMR proteins (MLH1/MSH2/MSH6/PMS2)(N Health)	RI182	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	5,500	In Lab	
ImmunoHisto-Lambda(N Health)	RI183	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
ImmunoHisto-Kappa(N Health)	RI184	7 days	Immunohistochemistry method		Tissue paraffin block	Room temp	1,500	In Lab	
Immunohisto-NapsinA (N Health)	RI185	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	1,500	In Lab	
Immunohisto-ROS1(SP384)(VENTANA)	RI186	7 days	Immunohistochemical stain		Tissue paraffin block.	Room temp .	4,800	In Lab	
ALK (D5F3) CDx (VENTANA) (Bio-Bridge Project)	RP002	5 days	Automate Ventana system, IHC method.		FFPE tumor tissue with primary histopathology report.	Room temp.	3,500	In Lab	
ImmunoHisto-PD-L1 (SP142) (Bio-Bridge Project)	RP003	5 days	VENTANA PD-L1 (SP142) Assay is a qualitative immunohistochemical assay using rabbit monoclonal anti-PD-L1 clone SP142 intended for use in the assessment of the PD-L1 protein in formalin-fixed, paraffin-embedded (FFPE) urothelial carcinoma and non-small cell lung cancer (NSCLC) tissue stained with OptiView DAB IHC Detection Kit and OptiView Amplification Kit on a VENTANA BenchMark ULTRA instrument. Determination of PD-L1 status is indication-specific, and evaluation is based on either the proportion of tumor area occupied by PD-L1 expressing tumor-infiltrating immune cells (% IC) of any intensity or the percentage of PD-L1 expressing tumor cells (% TC) of any intensity. PD-L1 expression in ≥ 5% IC determined by VENTANA PD-L1 (SP142) Assay in urothelial carcinoma tissue is associated with increased objective response rate (ORR) in a non-randomized study of TECENTRIQ® (atezolizumab). PD-L1 expression in ≥ 50% TC or ≥ 10% IC determined by VENTANA PD-L1 (SP142) Assay in NSCLC tissue may be associated with enhanced overall survival from TECENTRIQ (atezolizumab).		FFPE tumor tissue with primary histopathology report.	room temp	6,000	In Lab	
Specimen preparation for BCC Mdx	RP004	1 day	Tissue Steriled preparation technique		Tissue paraffin block with primary pathology report.	Room temp	600	In Lab	
Her2 gene (DISH) (Synergy project)	RP005	7 days	Assessment of HER2 gene copy number was performed by the FDA-approved HER2 DISH (dual in situ hybridization) assay (Ventana) . HER2 was detected by a dinitrophenyl (DNP) labeled probe and visualized by ultraView SISH DNP (silver in situ hybridization) Detection Kit. The Chr17 centromere (CEN-17) was targeted with a digoxigenin (DIG) labeled probe and detected using ultraView Red ISH DIG Detection Kit.		Breast cancer tissue in paraffin block	Room Temp	13,500	In Lab	
ALK (D5F3) CDx (VENTANA) (Pfizer Project)	RP007	7 days	Automate Ventana system, IHC method.		FFPE tumor tissue with primary histopathology report.	Room temp.	3,500	In Lab	
Internal Refer case	RU002	5 days	Consult		N Health Pathology Block/Slide	Room temp	0	In Lab	