

**Premier Integrated Labs Pantai Hospital Klang (PIL PHK)**  
**Test Methodology List**  
**Issue 2, 24 March 2026**

DEPARTMENT	ANALYTE	TEST METHODOLOGY
BIOCHEMISTRY	Adjusted Calcium	Calculated (Payne's Formula)
BIOCHEMISTRY	Alanine Transaminase	Modified Wroblewski and LaDue, , Modified IFCC without P5P
BIOCHEMISTRY	Albumin	Bromocresol Purple solution (BCP)
BIOCHEMISTRY	Albumin, 24 Hour Urine	Calculated
BIOCHEMISTRY	Albumin, Urine	PEG-enhanced immunoturbidimetric
BIOCHEMISTRY	Albumin/Creatinine Ratio	Calculated
BIOCHEMISTRY	Albumin/Globulin Ratio	Calculated
BIOCHEMISTRY	Alkaline Phosphatase	Bowers and McComb, IFCC Standardization
BIOCHEMISTRY	Amylase	Ethylidene Blocked -pNPG7
BIOCHEMISTRY	Amylase, 24 Hour Urine	Calculated
BIOCHEMISTRY	Amylase, Fluid	Ethylidene Blocked -pNPG7
BIOCHEMISTRY	Amylase, Urine (Diastase)	Ethylidene Blocked -pNPG7
BIOCHEMISTRY	Aspartate Transaminase	Modified IFCC without P5P
BIOCHEMISTRY	Bilirubin, Direct	Vanadate Oxidation
BIOCHEMISTRY	Bilirubin, Indirect	Calculated (Bilirubin, Total minus Bilirubin, Direct)
BIOCHEMISTRY	Bilirubin, Neonatal	Spectrophotometric
BIOCHEMISTRY	Bilirubin, Total	Vanadate Oxidation
BIOCHEMISTRY	Brain Natriuretic Peptides (NT ProBNP)	Fluorescence immunoassay
BIOCHEMISTRY	Calcium	Arsenazo III
BIOCHEMISTRY	Calcium, 24 Hour Urine	Calculated
BIOCHEMISTRY	Calcium, Urine	Arsenazo III
BIOCHEMISTRY	Calcium/Creatinine Ratio, Urine	Calculated (Ratio)
BIOCHEMISTRY	Chloride	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Chloride, 24 Hour Urine	Calculated
BIOCHEMISTRY	Chloride, post	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Chloride, Urine	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Cholesterol, HDL	Elimination/ catalase reaction
BIOCHEMISTRY	Cholesterol, LDL	Calculated (Sampson equation)
BIOCHEMISTRY	Cholesterol, Non-HDL	Calculated
BIOCHEMISTRY	Cholesterol, Total	Enzymatic cholesterol oxidase, esterase, peroxidase
BIOCHEMISTRY	Cholesterol/HDL Ratio	Calculated (Ratio)
BIOCHEMISTRY	Creatine Kinase	Modified IFCC
BIOCHEMISTRY	Creatine Kinase-MB (CK-MB)	Chemiluminescence (CLIA)
BIOCHEMISTRY	Creatinine	Enzymatic
BIOCHEMISTRY	Creatinine Clearance	Calculated (Creatinine clearance adjusted equation)
BIOCHEMISTRY	Creatinine, 24 Hour Urine	Calculated
BIOCHEMISTRY	Creatinine, post	Enzymatic
BIOCHEMISTRY	Creatinine, Urine	Enzymatic
BIOCHEMISTRY	Estimated - GFR ( CKD-EPI )	Calculated (2009 CKD-EPI creatinine equation)
BIOCHEMISTRY	Fibrosis Score, FIB4	Calculated (2006 study by Sterling et al.)
BIOCHEMISTRY	FibroTest	Calculated
BIOCHEMISTRY	Gamma-Glutamyl Transferase	L-γ-glutamyl-3-carboxy-4-nitroanilide substrate reaction/ IFCC
BIOCHEMISTRY	Globulin	Calculated
BIOCHEMISTRY	Glucose	Hexokinase
BIOCHEMISTRY	Glucose (1-Hour)	Hexokinase
BIOCHEMISTRY	Glucose (2-Hour)	Hexokinase
BIOCHEMISTRY	Glucose, Urine (Fasting)	Automated reflectance spectroscopy
BIOCHEMISTRY	Glucose, Urine (1- Hour)	Automated reflectance spectroscopy
BIOCHEMISTRY	Glucose, Urine (2- Hour)	Automated reflectance spectroscopy
BIOCHEMISTRY	HbA1c, NGSP unit	Ion-exchange high-performance liquid chromatography (HPLC)
BIOCHEMISTRY	High Sensitive Troponin I	Chemiluminescence (CLIA)
BIOCHEMISTRY	Lactate Dehydrogenase	Lactate to pyruvate, nicotinamide adenine dinucleotide (NAD)
BIOCHEMISTRY	Phosphate	Phosphomolybdate
BIOCHEMISTRY	Phosphate, 24 Hour Urine	Calculated
BIOCHEMISTRY	Phosphate, Urine	Phosphomolybdate
BIOCHEMISTRY	Potassium	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Potassium, 24 Hour Urine	Calculated
BIOCHEMISTRY	Potassium, post	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Potassium, Urine	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Protein, 24 Hour Urine	Calculated
BIOCHEMISTRY	Protein, Urine	Pyrogallol red-molybdate
BIOCHEMISTRY	Sodium	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Sodium, 24 Hour Urine	Calculated

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BIOCHEMISTRY	Sodium, post	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Sodium, Urine	Indirect Integrated Multisensor Technology (IMT)
BIOCHEMISTRY	Total Protein	Biuret reaction
BIOCHEMISTRY	Triglycerides	Glycerol Phosphate Oxidase reaction
BIOCHEMISTRY	Urea Nitrogen	Urease/ glutamate dehydrogenase
BIOCHEMISTRY	Urea Nitrogen, 24 Hour Urine	Calculated
BIOCHEMISTRY	Urea Nitrogen, post	Urease/ glutamate dehydrogenase
BIOCHEMISTRY	Urea Nitrogen, Serum	Urease/ glutamate dehydrogenase
BIOCHEMISTRY	Urea Nitrogen, Urine	Urease/ glutamate dehydrogenase
BIOCHEMISTRY	Urea Reduction Ratio, URR	Calculated (Ratio)
BIOCHEMISTRY	Uric Acid	Uricase
BIOCHEMISTRY	Uric Acid, 24 Hour Urine	Calculated
BIOCHEMISTRY	Uric Acid, Urine	Uricase
BIOCHEMISTRY	Urine Protein to Creatinine Ratio	Calculated (Ratio)
IMMUNOLOGY & SEROLOGY	Alpha-fetoprotein	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	CEA	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	CA 125	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	CA 15-3	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	CA 19-9	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	C-Reactive Protein	Particle enhanced turbidimetric immunoassay (PETIA)
IMMUNOLOGY & SEROLOGY	Dengue IgG	Fluorescence immunoassay
IMMUNOLOGY & SEROLOGY	Dengue IgM	Fluorescence immunoassay
IMMUNOLOGY & SEROLOGY	Dengue NS1 Antigen	Fluorescence immunoassay
IMMUNOLOGY & SEROLOGY	Filariasis IgG	Rapid chromatographic immunoassay
IMMUNOLOGY & SEROLOGY	Filariasis IgM	Rapid chromatographic immunoassay
IMMUNOLOGY & SEROLOGY	Helicobacter pylori IgG	Immunochemical
IMMUNOLOGY & SEROLOGY	Hepatitis A Total Antibody	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	Hepatitis Bs Antibody	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	Hepatitis Bs Antigen	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	HCV Antibody	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	HIV Ag/Ab Screening	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	Total hCG	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	Influenza A	Fluorescence immunoassay
IMMUNOLOGY & SEROLOGY	Influenza B	Fluorescence immunoassay
IMMUNOLOGY & SEROLOGY	Mycoplasma pneumoniae IgM	Immunochemical
IMMUNOLOGY & SEROLOGY	Prostate Specific Ag, Total	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	RPR	Nontreponemal Flocculation Test
IMMUNOLOGY & SEROLOGY	Respiratory Tract Infection Combo 6 Rapid Test	Immunochemical
IMMUNOLOGY & SEROLOGY	Rheumatoid Factor	Latex-enhanced immunoturbidimetric
IMMUNOLOGY & SEROLOGY	TPHA	Indirect micro haemagglutination
IMMUNOLOGY & SEROLOGY	Treponema pallidum Ab	Chemiluminescence (CLIA)
IMMUNOLOGY & SEROLOGY	Salmonella typhi IgG	Immunochemical
IMMUNOLOGY & SEROLOGY	Salmonella typhi IgM	Immunochemical
ENDOCRINE	Free T3	Chemiluminescence (CLIA)
ENDOCRINE	Free T4	Chemiluminescence (CLIA)
ENDOCRINE	Thyroid Stimulating Hormone	Chemiluminescence (CLIA)
DRUG	Urine Amphetamine (Qualitative)	Lateral Flow Immunoassay (LFIA)
DRUG	Urine Cannabinoids (Qualitative)	Lateral Flow Immunoassay (LFIA)
DRUG	Urine Opiates (Qualitative)	Lateral Flow Immunoassay (LFIA)
MICROBIOLOGY	Rotavirus Antigen, Stool	Immunochemical
HAEMATOLOGY	APTT	Turbidimetric
HAEMATOLOGY	Bleeding Time	Duke method
HAEMATOLOGY	Bone Marrow Aspiration Report (BMR)	Microscopic examination
HAEMATOLOGY	Bone Marrow Biopsy Report (BMBX)	Histology examination
HAEMATOLOGY	Clotting Time	Lee-White method
HAEMATOLOGY	Erythrocyte Sedimentation Rate	Photometric rheoscope
HAEMATOLOGY	Full Blood Count	Sheath flow impedance method (Cell differentiation) Colorimetric (Haemoglobin measurement)
HAEMATOLOGY	G6PD	UV method
HAEMATOLOGY	Microfilaria Screen, Direct Smear	Microscopic examination
HAEMATOLOGY	Peripheral Blood Film	Microscopic examination
HAEMATOLOGY	Prothrombin Time (PT)	Turbidimetric
HAEMATOLOGY	Reticulocyte	Microscopic examination
MOLECULAR	Gastrointestinal Panel	Multiplex real-time PCR
MOLECULAR	Respiratory Panel	Multiplex real-time PCR
FEME	Urine FEME	Automated Reflectance Spectrophotometry & digital microscopy imaging method
BLOOD BANK	ABO & Rh D Blood Grouping	Semi-automated column agglutination (gel card)/Manual method

DEPARTMENT	ANALYTE	TEST METHODOLOGY
BLOOD BANK	Cross-matching	Column agglutination (gel card)
BLOOD BANK	Direct Antiglobulin Test	Column agglutination (gel card)
BLOOD BANK	Antibody Screening / Indirect Antiglobulin Test	Column agglutination (gel card)