

Clinical Tests Reference Ranges

Items	Reference ranges		Units	Test Equipment and Analysis Method	Mesurement Facility		
	Male	Female					
Biochemistry							
Protein,Total	6.7-8.3		g/dL	Canon Medical Systems Corporation TBA-2000FR	Biuret method Improved BCP method JSCC standardised method JSCC standardised method IFCC standardised method Enzymatic assay Enzymatic assay IFCC standardised method JSCC standardised method L-leusyl-p-nitroanilid method JSCC standardised method JSCC standardised method Enzymatic assay Urease-LEDH method Enzymatic assay Enzymatic assay ISE(Ion Selective Eelectorode) ISE(Ion Selective Eelectorode) ISE(Ion Selective Eelectorode) Arsenazo III method Enzymatic assay Enzymatic assay Enzymatic assay Enzymatic assay (Direct method) Enzymatic assay (Direct method) Enzymatic assay(Free glycerol remove method) Enzymatic assay Latex agglutination nephelometry Nitroso-PSAP method Latex agglutination nephelometry Nitroso-PSAP method		
Albumin	3.8-5.2		g/dL				
Albumin/Globulin Ratio	1.1-2.0						
Asparate aminotransferase	10-40		U/L				
Alanine aminotransferase	5-45		U/L				
Lactate dehydrogenase	124-222		U/L				
Bilirubin,Total	0.2-1.2		mg/dL				
Bilirubin,Direct	0.0-0.2		mg/dL				
Alkaline phosphatase	38-113		U/L				
γ-Glutamyltransferase	≤80	≤30	U/L				
Leucine aminopeptidase	45-81	37-61	U/L				
Cholinesterase	234-493	200-452	U/L				
Creatine kinase	60-270	40-150	U/L				
Amylase	40-122		U/L				
Blood urea nitrogen	8.0-20.0		mg/dL				
Creatinine	0.61-1.04	0.47-0.79	mg/dL				
Uric acid	3.8-7.0	2.5-7.0	mg/dL				
Sodium	137-147		mEq/L				
Chloride	98-108		mEq/L				
Potassium	3.5-5.0		mEq/L				
Calcium	8.4-10.4		mg/dL				
Inorganic Phosphate	2.5-4.5		mg/dL				
Magnesium	1.9-2.5		mg/dL				
Cholesterol,Total	120-219		mg/dL				
Cholesterol,LDL	65-139		mg/dL				
Cholesterol,HDL	40-85	40-95	mg/dL				
Triglyceride(s)	30-149		mg/dL				
Glucose	70-109		mg/dL				
C-Reactive protein	≤0.30		mg/dL				
Bilirubin,Indirect	0.2-1.0		mg/dL				
Fe	50-200	40-180	μg/dL				
Ferritin	9.0-275	4.0-87.0	ng/mL				
UIBC	140-330	150-385	μg/dL				
TIBC	270-425	270-440	μg/dL				
HbA1c	4.6-6.2		%			Tosoh Bioscience HLC-723G11	HPLC
Hematology							
White blood cell count	3300-9000		/μL			Sysmex Corporation Sysmex XN-1000	Flow Cytometry method DC detection method SLS-Hb method DC detection method DC detection method DC detection method DC detection method Flow Cytometry method Flow Cytometry method Flow Cytometry method
Red blood cell count	430-570	380-500	×10 ⁴ /μL				
Hemoglobin	13.5-17.5	11.5-15.0	g/dL				
Hematocrit	39.7-52.4	34.8-45.0	%				
Mean corpuscular volume	85-102		fL				
Mean corpuscular hemoglobin	28.0-34.0		pg				
Mean corpuscular hemoglobin concentration	30.2-35.1		%				
Platelet count	14.0-34.0		×10 ⁴ /μL				
Reticulocytes	4-19		%				
Differential white blood cell count	Neutrophils	40.0-75.0	%				
	Lymphocytes	18.0-49.0	%				
	Monocytes	2.0-10.0	%				
	Eosinophils	0.0-8.0	%				
	Basophils	0.0-2.0	%				
Urinalysis							
Color				Siemens Healthcare Diagnostics Corporation Clinitek Advantus	Eye sight Refractometer method Testing paper		
Specific gravity	1.006-1.030						
pH	5.0-7.5						
Glucose	(-)						
Protein	(-)						
Occult blood	(-)						
Ketone bodies	(-)						
Bilirubin	(-)						
Urobilinogen	(±)						
Nitrite	(-)						
Leukocytes	(-)						
Turbidity							
Sedimentary test,Erythrocytes			/HPF				
Sedimentary test,Leukocytes			/HPF				
Sedimentary test,Squamous epithelial cells			/HPF				
Drug testing,Urine	(-)						
Pregnancy test							
Cotinine test	(-)						
Others							
Breath alcohol test	0.00		mg/L	Semiconductor sensor			
Occult blood,Fecal	(-)			Immuno-chromatography			
Coaglation tests							
Prothrombin time;seconds	9.4-12.5		sec	Sysmex Corporation CA-650	Light scattering method		
Prothrombin time;Activity	70-100		%				
Prothrombin time;INR	0.85-1.15						
Activated partial thromboplastin time	25.0-36.0		sec				
Immunology							
Syphilis test,RPR	(-)			Canon Medical Systems Corporation TBA-1500FR	Latex agglutination nephelometry Latex agglutination nephelometry		
Syphilis test,TP antibody	(-)						
HBs antigen	(-)						
HCV antibody,3rd generation,LPIA	(-)						
HIV antigen and antibody	(-)			Abbott Japan Corporation ARCHITECT	CLIA CLIA CLIA		
Syphilis test,RPR	(-)						
Syphilis test,TP antibody	(-)						
HBs antigen	(-)						
HCV antibody,2nd generation	(-)			Real-Time RT-PCR	Nishikumamoto Hospital BML		
HIV antigen and antibody	(-)						
SARS-CoV-2/PCR	Negative						
SARS-CoV-2/PCR	Not Detected			Real-Time RT-PCR			