

Normal Reference Range Table

Hematology Tests

Hematocrit (Hct)		40-52% (Male) 37-46% (Female) 31-43% (Child)
Hemoglobin (Hgb)		13.2-16.2 gm/dL (Male) 12.0-15.2 gm/dL (Female)
Red Blood Cell Count (RBC)		4.3-6.2x10 ⁶ /μL (Male) 3.8-5.5x10 ⁶ /μL (Female) 3.8-5.5x10 ⁶ /μL (Infant/Child)
White Blood Cell Count (WBC)		4.1-10.9x10 ³ /μL
	Diff	
	Polymorphonuclear Cells (polys)	35-80%
	Immature Polys (bands)	0-10%
	lymphocytes (lymp)	20-50%
	monocytes (mono)	2-12%
	eosinophils (eos)	0-7%
	basophils (bas)	0-2%
Platelet Count (Plt)		140-450x10 ³ /μL
Red Cell Distribution Width (RDW)	Coefficient of variation	11.5-14.5%
	standard deviation	35-47 fL
RBC Mean Cell Volume (MCV)		82-102 fL (Male) 78-101 fL (Female)
Mean Cell Hemoglobin Concentration (MCHC)		31-35 gm/dL
CD4+		31-63% 416-1751/μL (Absolute #)
Reticulocyte		0.5-1.5% (Adult) 1.1-4.5% (Newborn) 0.5-3.1% (Infant)
Prothrombin Time (PT)		12-14 seconds
Partial Thromboplastin Time (PTT)		18-28 seconds
Fibrinogen		170-420 mg/dL
Iron Studies		
Total Serum Iron (TSI)		76-198 μg/dL (Male) 26-170 μg/dL (Female)
Total Iron-Binding Capacity (TIBC)		262-474 μg/dL
Transferrin		204-360 mg/dL

Ferritin

18-250 ng/mL (Male)

12-160 ng/mL (Female)

Chemistry Tests

Aspartate aminotransferase (AST)	5-35 U/L
Alanine aminotransferase (ALT)	7-56 U/L
Albumin	3.5-4.8 U/L
Alkaline phosphatase (ALP)	38-126 U/L
Amylase	30-110 U/L
Anti-streptolysin O Titer (ASO)	<250 (school age) <125 (adult)
Bicarbonate	22-26 mEq/L
Bilirubin, direct	<0.3 mg/dL
Bilirubin, total	0.2-1.3 mg/dL
Calcium	8.9-10.4 mg/dL
Cholesterol	120-200 mg/dL
Creatinine	0.5-1.4 mg/dL
Gamma GT	8-78 U/L
Glucose	65-110 mg/dL
Lipase	7-60 U/L
Potassium	3.6-5.0 mEq/L
Sodium	137-145 mEq/L
Total Protein	6.3-8.2 gm/dL
Triglyceride	50-250 mg/dL
Uric Acid	3.5-8.5 mg/dL
Urea Nitrogen (BUN)	7-21 mg/dL

Cardiac Tests

Total CK	38-120 ng/mL
CK-MB	0-3 ng/mL
CK-index	0-3
Troponin	<0.4 ng/mL

Blood Gas

pH	7.34-7.44
pCO ₂	35-45 mmHg
pO ₂	75-100 mmHg
HCO ₃	22-26 mEq/L

Urinalysis

Specific gravity	1.002-1.030
pH	5-7
Protein	negative-trace
Glucose	negative
Ketone	negative
Bilirubin	negative

Blood	negative
Nitrite	negative
Leukocyte	negative
Urobilinogen	0.2-1.0 Ehr U/dL

Micro

RBCs	0-2/HPF
WBCs	0-2/HPF
RBC casts	0/HPF

CSF

Glucose	50-80 ng/dL
Protein	15-45 mg/dL
RBCs	0/ μ L
WBCs	0-3/ μ L

Thyroid

T ₃ -total	60-181 ng/mL
T ₄ -free	0.8-1.5 ng/dL
T ₄ -total	5.5-12.3 ng/mL
TBG	12-30 mg/L
Thyroid Stimulating Hormone (TSH)	0.4-4.5 μ IU/mL

Endocrine

17-OHCS	<4 mg/day
Adrenocorticotrophic Hormone (ACTH)	20-100 pg/mL
Alpha-Fetoprotein (AFP), serum	0-44 ng/mL
Beta-HCG	<5 mU/mL (Male, non-pregnant Female)
CA 19-9	<40 U/mL
Prolactin	0-14 ng/mL

Miscellaneous

Rheumatoid Factor	<30 IU/mL
Prostatic Specific Antigen (PSA)	0-4 ng/mL