

Reference Ranges

Test Name	Normal Range (Male)	Normal Range (Female)
Hematology		
Hematocrit	40-50%	35-45%
Hemoglobin	13.7-17.0 g/dl	12.0-15.4 g/dl
Red Blood Cell (RBC) count	4.2-5.6 M/ul	3.8-5.2 M/ul
White Blood Cell (WBC) count	4.0-11.0 k/ul	4.0-11.0 k/ul
Neutrophils	40-74%	40-74%
Bands	0 – 5%	0 – 5%
Lymphocytes	19-48%	19-48%
Monocytes	0-12%	0-12%
Basophils (if indicated)	0-3%	0-3%
Eosinophils (if indicated)	0-7%	0-7%
Platelet count	150-400 K/uL	150-400 K/uL
Mean corpuscular volume	81-98 fl	81-98 fl
Mean corpuscular hemoglobin concentration	32-37 g/dl	32-37 g/dl
MCH	27-33 pG	27-33 pG
Clinical Chemistry		
Sodium	136-145 mMol/L	136-145 mMol/L
Potassium	3.5-5.1mMol/L	3.5-5.1mMol/L
Chloride	98-107 mMol/L	98-107 mMol/L
CO2	20-30mMol/L	20-30mMol/L
Blood Urea Nitrogen (BUN)	7-26 mg/dl	7-20 mg/dl
Serum creatinine	0.69-1.25 mg/dl	0.6-1.11 mg/dl
Glucose	70-99 mg/dl	70-99 mg/dl
Calcium	8.4-10.8 mg/dl	8.4-10.8 mg/dl
Inorganic phosphorus	2.3-4.7 mG/dl	2.3-4.7 mG/dl
Magnesium	1.6-2.6 mG/dl	1.6-2.6 mG/dl
Total protein	6.4-8.3 G/dl	6.4-8.3 G/dl
Albumin	3.4-5.0 G/dl	3.4-5.0 G/dl
Total Cholesterol	7.0-200 mg/dl	7.0-200 mg/dl
Triglycerides	7.0-150 mg/dl	7.0-150 mg/dl
HDL	Interpretive Data on Report	Interpretive Data on Report
LDL	1 – 100 mg/dl	1 – 100 mg/dl
Total bilirubin	0.1-1.2 mG/dl	0.1-1.2 mG/dl
Direct Bilirubin	0.1 – 0.5 mg/dl	0.1 – 0.5 mg/dl
SGPT/ALT	11-55 IU/L	11-55 IU/L

Test Name	Normal Range (Male)	Normal Range (Female)
Direct Bilirubin	0.1 – 0.5 mg/dl	0.1 – 0.5 mg/dl
SGPT/ALT	11-55 IU/L	11-55 IU/L
SGOT/AST	5-34 IU/L	5-34 IU/L
Alkaline phosphatase	59-150 IU/L	48-150 IU/L
Amylase	20-160 IU/L	20-160 IU/L
Lipase	8-78 IU/L	8-78 IU/L
Uric acid	3.0-8.3 mG/dl	2.5-6.5 mG/dl
Lactate dehydrogenase (LDH)	125-220 IU/L	125-220 IU/L
Urine Creatinine	1.0-2.0 mg/dl	0.8-1.8 mg/dl
Urine Microalbumin	1.5 – 3.0mg/dl slight microalbuminuria 3.0-20.0 Significant microalbuminuria 30.0-300.0 Microalbuminuria	1.5 – 3.0mg/dl slight microalbuminuria 3.0-20.0 Significant microalbuminuria 30.0-300.0 Microalbuminuria
Urine Micro Albumin/ Creat Ratio	<30 Normal 30 – 300 Microalbuminuria >300 Clinical albuminuria	<30 Normal 30 – 300 Microalbuminuria >300 Clinical albuminuria
Estimated glomerular filtration rate (eGFR)	>60 mL/min/1.73m ²	>60 mL/min/1.73m ²
Serum BHCG Quant	Negative	Negative
Urine BHCG Qual.	Negative	Negative
Beta-2 Microglobulin	0.97-2.64 mg/L	0.97-2.64 mg/L
Hemoglobin A1c	<6.5%	<6.5%
BNP (Brain Natriuretic Peptide)	10-100 pg/ml	10-100 pg/ml
Serum Free Light Chains		
Kappa Free Light Chain	2.37– 20.73 mg/L	2.37 – 20.73 mg/L
Lambda Free Light Chain	4.23 – 27.69 mg/L	4.23 – 27.69 mg/L
K:L Ratio	0.26 – 1.65	0.26 – 1.65
Serum Immunofixation Electrophoresis	NORMAL PATTERN No evidence of monoclonal dysproteinemia	NORMAL PATTERN No evidence of monoclonal dysproteinemia
Urine Immunofixation Electrophoresis	NORMAL PATTERN No evidence of monoclonal dysproteinuria	NORMAL PATTERN No evidence of monoclonal dysproteinuria
Serum Protein Electrophoresis	NORMAL PATTERN. No evidence for inflammatory process or dysproteinemia.	NORMAL PATTERN. No evidence for inflammatory process or dysproteinemia.
Total Protein	5.7 – 7.7 gm/dl	5.7 – 7.7 gm/dl
Albumin	3.4 – 5.4 gm/dl	3.4 – 5.4k:l gm/dl
Alpha 1	0.1 – 0.4 gm/dl	0.1 – 0.4 gm/dl
Alpha 2	0.4 – 0.9 gm/dl	0.4 – 0.9 gm/dl
Beta	0.5 – 1.0 gm/dl	0.5 – 1.0 gm/dl
Gamma	0.5 – 1.2 gm/dl	0.5 – 1.2 gm/dl
“M” Spike	Peak 1 and Peak 2	Peak 1 and Peak 2
A/G Ratio	1.5 – 2.3	1.5 – 2.3
Albumin Relative %	60.3 – 71.4 %	60.3 – 71.4 %

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Alpha 1 Relative %	1.4 – 2.9 %	1.4 – 2.9 %
Alpha 2 Relative %	7.2 – 11.3 %	7.2 – 11.3 %
Beta Relative %	8.1 – 12.7 %	8.1 – 12.7 %
Gamma relative %	8.7 – 16.0 %	8.7 – 16.0 %
Urine Protein Electrophoresis	Minimal proteinuria. No evidence for Bence-Jones proteinuria.	Minimal proteinuria. No evidence for Bence-Jones proteinuria.
Total Protein	NO range mg/dl	NO range mg/dl
Albumin	NO range mg/dl	NO range mg/dl
Alpha 1	NO range mg/dl	NO range mg/dl
Alpha 2	NO range mg/dl	NO range mg/dl
Beta	NO range mg/dl	NO range mg/dl
Gamma	NO range mg/dl	NO range mg/dl
“M” Spike	No range	No range
A/G Ratio	No range	No range
Albumin Relative %	No range	No range
Alpha 1 Relative %	No range	No range
Alpha 2 Relative %	No range	No range
Beta Relative %	No range	No range
Gamma relative %	No range	No range
Thyroid Function		
TSH	0.35-4.94 uIU/ml	0.35-4.94 uIU/ml
FreeT4	0.58-1.64 ng/dl	0.58-1.64 ng/dl
T4 Total	4.9-11.7 ug/dl	4.9-11.7 ug/dl
T3 Total	58-159 ng/dl	58-159 ng/dl
Serology/Molecular		
Hep B Ag	Non Reactive	Non Reactive
Hep C Qual PCR	target not detected	target not detected
Hep C RNA Quant	not detected	not detected
Urinalysis		
Specific gravity	1.001-1.030	1.001-1.030
Ketones	Negative	Negative
pH	5.0-9.0	5.0-9.0
Protein	Negative	Negative
Blood	Negative	Negative
Glucose	Negative	Negative
Urobilinogen	0-1	0-1
Bilirubin	Negative	Negative
WBC	0-10/HPF	0-10/HPF
RBC	0-10/HPF	0-10/HPF
Squamous Epithelial Cells	0-4-HPF	0-4-HPF
Bacteria	None Seen-Trace	Non Seen-Trace

Test Name	Normal Range (Male)	Normal Range (Female)
Coagulation		
Prothrombin Time (PT)	11.6-15.0 sec	11.6-15.0 sec
Partial thromboplastin time (PTT)*	23.0-40.0 sec	23.0-40.0 sec
International normalized ratio (INR)*	1.0 normal anticoagulation	1.0 normal anticoagulation