

Blood, Plasma, Serum	Reference Range	SI Reference
✦ Alanine aminotransferase (ALT)	8–20 U/L	8–20 U/L
Amylase, serum	25–125 U/L	25–125 U/L
Aspartate aminotransferase (AST)	8–20 U/L	8–20 U/L
✦ Bilirubin, serum (adult) Total // Direct	0.3–1.0 mg/dL // 0.0–0.3 mg/dL	2–17 μmol/L // 0–5 μmol/L
Calcium, serum (Ca2+)	8.4–10.2 mg/dL	2.1–2.6 mmol/L
✦ Cholesterol, serum	Rec: <200 mg/dL	Rec: <5.2 mmol/L
✦ Cortisol, serum	0800 h: 5–23 μg/dL // 1600 h: 3–15 μg/dL	0800 h: 138–625 nmol/L // 1600 h: 82–403 nmol/L
Creatine kinase, serum	2000 h: ± 50% of 0800 h	2000 h: Fraction of 0800 h: ± 0.50
	Male: 25–90 U/L	Male: 25–90 U/L
	Female: 10–70 U/L	Female: 10–70 U/L
✦ Creatinine, serum	0.6–1.2 mg/dL	53–106 μmol/L
Electrolytes, serum		
Sodium (Na+)	136–145 mEq/L	136–145 mmol/L
Chloride (Cl−)	95–105 mEq/L	95–105 mmol/L
✦ Potassium (K+)	3.5–5.0 mEq/L	3.5–5.0 mmol/L
Bicarbonate (HCO3−)	22–28 mEq/L	22–28 mmol/L
Magnesium (Mg2+)	1.5–2.0 mEq/L	0.75–1.0 mmol/L
Estradiol, total, serum (in pregnancy)		
24–28 wks // 32–36 wks	30–370 ng/mL // 60–280 ng/mL	104–590 // 208–970 nmol/L
28–32 wks // 36–40 wks	40–220 ng/mL // 80–350 ng/mL	140–760 // 280–1290 nmol/L
Ferritin, serum	Male: 15–200 ng/mL	Male: 15–200 μg/L
	Female: 12–150 ng/mL	Female: 12–150 μg/L
Follicle-stimulating hormone, serum/plasma	Male: 4–25 mIU/mL	Male: 4–25 U/L
	Female: premenopause 4–30 mIU/mL	Female: premenopause 4–30 U/L
	midcycle peak 10–90 mIU/mL	midcycle peak 10–90 U/L
	postmenopause 40–250 mIU/mL	postmenopause 40–250 U/L
Gases, arterial blood (room air)		
pH	7.35–7.45	[pH] 36–44 nmol/L
Pco2	33–45 mm Hg	4.4–5.9 kPa
Po2	75–105 mm Hg	10.0–14.0 kPa
✦ Glucose, serum	Fasting: 70–110 mg/dL	Fasting: 3.8–6.1 mmol/L
Growth hormone - arginine stimulation	2-h postprandial: < 120 mg/dL	2-h postprandial: < 6.6 mmol/L
	Fasting: < 5 ng/mL	Fasting: < 5 μg/L
	provocative stimuli: > 7 ng/mL	provocative stimuli: > 7 μg/L
Gases, arterial blood (room air)		
IgA	76–390 mg/dL	0.76–3.90 g/L
IgE	0–380 IU/mL	0–380 kIU/L
IgG	650–1500 mg/dL	6.5–15 g/L
IgM	40–345 mg/dL	0.4–3.45 g/L
Iron	50–370 μg/dL	9–30 μmol/L
Lactate dehydrogenase, serum	45–90 U/L	45–90 U/L
Luteinizing hormone, serum/plasma	Male: 6–23 mIU/mL	Male: 6–23 U/L
	Female: follicular phase 5–30 mIU/mL	Female: follicular phase 5–30 U/L
	midcycle 75–150 mIU/mL	midcycle 75–150 U/L
	postmenopause 30–200 mIU/mL	postmenopause 30–200 U/L
Osmolality, serum	275–295 mOsmol/kg H2O	275–295 mOsmol/kg H2O
Parathyroid hormone, serum, N-terminal	14–65 pg/mL	230–630 ng/L
✦ Phosphatase (alkaline), serum (p-NPP at 30°C)	20–70 U/L	20–70 U/L
✦ Phosphorus (inorganic), serum	3.0–4.5 mg/dL	1.0–1.5 mmol/L
Prolactin, serum (hPRL)	< 20 ng/mL	< 20 μg/L
✦ Proteins, serum		
Total (recumbent)	6.0–7.0 g/dL	60–70 g/L
Albumin	3.5–5.5 g/dL	35–55 g/L
Globulin	2.3–3.5 g/dL	23–35 g/L
Thyroid-stimulating hormone, serum or plasma	0.5–5.0 μIU/mL	0.5–5.0 mU/L
Thyroidal iodine (123I) uptake	8%–30% of administered dose/24 h	0.08–0.30/24 h
Thyroxine (T4), serum	5–12 μg/dL	64–155 nmol/L
Triglycerides, serum	35–160 mg/dL	0.4–1.81 mmol/L
Triiodothyronine (T3), serum (RIA)	115–190 ng/dL	1.8–2.9 nmol/L
Triiodothyronine (T3) resin uptake	25%–35%	0.25–0.35
✦ Urea nitrogen, serum	7–18 mg/dL	1.2–3.0 mmol/L
✦ Uric acid, serum	3.0–8.2 mg/dL	0.18–0.48 mmol/L
✦ Included in the Biochemical Profile (SMA-12)		