
Lab Dept: Chemistry

Test Name: MAGNESIUM

General Information

Lab Order Codes: MG

Synonyms: Mg

CPT Codes: 83735 - Magnesium

Test Includes: Magnesium concentration in mg/dL.

Logistics

Test Indications: Useful for evaluating magnesium and electrolyte status. Magnesium is the fifth most abundant cation in the body and is second only to potassium within cells. Magnesium deficiencies are related to impairment of neuromuscular function, cardiovascular disease and hypertension.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 hour

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube, **preferred**
Alternate tube: Red, marble or gold top tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.

Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Analyze sample immediately or store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range:	Reference ranges by Method:	
	Method Abbott	
	0 – 14 days:	1.8 – 4.1
	15 – 364 days:	1.8 – 3.2
	1 – 18 years:	2.0 – 2.9
	Adult:	1..8 – 4.5

Critical Values: <1.2 mg/dL and >6.6 mg/dL

Limitations: Hemolysis causes an increase in magnesium and may be a cause for sample rejection. Excess bilirubin or lipemia increases magnesium values.

Methodology: ABBOTT: Enzymatic

References: Architect Magnesium Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, November 2018

Alinity Magnesium Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, November 2018

Jacobs & DeMott Laboratory Test Handbook Lexi-Comp, Inc (2001) Hudson, OH, 5th Edition

Biorad Liquichek Unassayed Chemistry Control Product Insert

Updates: 2/17/2005: Added >5.5 mEq/L to Critical Values
 12/10/2013: Units change from mEq/L to mg/dL. Note reference range changes.
 2/10/2016: Updated alt tube types
 10/18/2019: New backup instrumentation and related reference ranges
 11/24/2020: Removed method Siemens Vista.