
Lab Dept: Chemistry

Test Name: IgM (IMMUNOGLOBULIN M)

General Information

Lab Order Codes: IGM

Synonyms: Immunoglobulin M

CPT Codes: 82784 – Gammaglobulin; IgM, each

Test Includes: IgM concentration reported in mg/dL.

Logistics

Test Indications: Immunoglobulins, also known as humoral antibodies, recognize antigens and initiate mechanisms that destroy antigens. IgM is the most primitive, least specialized immunoglobulin, and the only immunoglobulin that a neonate normally synthesizes. IgM is synthesized against antigens confined to the blood, such as erythrocyte surface antigens and tropical parasites.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 day

Special Instructions: N/A

Specimen

Specimen Type: Blood

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

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove aliquot into a plastic sample cup. Centrifuge turbid or particulate samples prior to analysis. Store at refrigerated temperatures for up to 7 days.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens

Interpretive

Reference Range:	0 – <15 days:	5 – 35 mg/dL
	15 days - <13 weeks:	12 – 71 mg/dL
	13 weeks - <1 year:	16 – 86 mg/dL
	1 - <19 years:	48 – 186 mg/dL
	Adult Male:	22 - 240 mg/dL
	Adult Female:	33 – 293 mg/dL

Critical Values: N/A

Limitations: Results from samples containing paraproteins (abnormal monoclonal antibodies) may incorrectly fall within the reference range. Samples with elevated total protein concentrations or samples from patients with suspected paraproteinemia can be screened using other laboratory methods such as protein electrophoresis. In addition, analysis of one or more diluted samples should be performed to ensure that consistent results are obtained. Specimens collected in EDTA collection tubes are not acceptable for use. Results should be evaluated by comparing to other clinically relevant information.

Turbidity and particles in samples can interfere with the assay. Therefore, particulate matter should be removed by centrifugation prior to running the assay.

Methodology: Immunoturbidimetric

References: Tietz (1999) Textbook of Clinical Chemistry, 3rd edition, Philadelphia, WB Saunders Company, pp 507-509

Bio-Rad Liquichek Immunology Control Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

CALIPER Reference Range Studies. Accessed October 27, 2020

Abbott Alinity c Specific Protein Calibrator Package Insert, Abbott
Diagnostics Division, Abbott Park, IL, 60064, USA, February 2018

Abbott Alinity c IgM Reagent Kit Instructions for Use, Abbott Diagnostics
Division, Abbott Park, IL, 60064, USA. Revised June 2019

Updates:

2/8/2016: Update alt tube types

11/23/2020: Update for new method Alinity, method Siemens Vista
removed.