
Lab Dept: Chemistry

Test Name: MANNOSE BINDING LECTIN

General Information

Lab Order Codes: MBL

Synonyms: N/A

CPT Codes: 83520 – Immunoassay for analyte other than infectious agent antibody or infectious agent antigen, quantitative, not otherwise specified

Test Includes: Mannose binding lectin reported in ng/mL

Logistics

Test Indications: Evaluation of children and adults with a clinical history of recurrent infections. Results may be useful for genetic counseling and support aggressive management of recurrent infections in patients with reduced levels of mannose-binding lectin.

Lab Testing Sections: Chemistry - Sendout

Referred to: Mayo Medical Laboratories (MML Test: MBL)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 8 days

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red)

Draw Volume: 1.5 mL (Minimum: 1.2 mL) blood

Processed Volume: 0.5 mL (Minimum: 0.4 mL) serum

Collection:	Routine blood collection
Special Processing:	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped plastic vial. Store and ship at frozen temperatures.
Patient Preparation:	N/A
Sample Rejection:	Gross hemolysis; gross lipemia; mislabeled or unlabeled specimens

Interpretive

Reference Range: Adults: > or =7.8 ng/mL

Interpretation: Diminished levels of serum mannose-binding lectin (MBL) are consistent with the diagnosis of MBL deficiency.

Levels <7.8 ng/mL are associated with homozygous or mixed heterozygous mutant forms of MBL or mutations in the MBL promoter gene.

Critical Values: N/A

Limitations: Measurement of mannose-binding lectin (MBL) immunochemically is highly dependent on the specificity of reagent anti-MBL antibody used to bind and detect MBL. Antibodies that detect multimers correlate with functional MBL activity and can be used to screen suspected individual for functional MBL deficiency. Measured with multimer specific anti-MBL, the frequency distribution of MBL levels in sera from healthy individuals is multimodal. According to a reference range study conducted by Mayo Clinic, approximately 14% of healthy individuals may have a measureable level <100 ng/mL. Accordingly, levels <100 ng/mL should be interpreted in the clinical context of the patient. The finding of a markedly reduced level of MBL may also occur in some healthy individuals. Identification of MBL deficiency does not exclude other etiologies that predispose to increased risk of infection.

Methodology: Enzyme-Linked Immunosorbent Assay (ELISA)

References: [Mayo Medical Laboratories](#) March 2018