Lab Dept: Chemistry

Test Name: MANNOSE BINDING LECTIN

General Information

Lab Order Codes: MBL

Synonyms: Mannan Binding Lectin Complement Pathway

CPT Codes: 86161 – Complement, functional activity, each component

Test Includes: Mannose binding lectin reported as a %.

Logistics

Test Indications: Investigation of recurrent meningococcal disease in young children.
Investigation of recurrent or severe infections in adults.
Investigation of glomerular kidney diseases.

Additionally, deficiencies of dysregulation within the complement system may be identified in patients when this test is used in combination with related tests.

Lab Testing Sections: Chemistry - Sendout

Referred to: Mayo Clinic Laboratories (MML Test: MBLF)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 14 days

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Red NO GEL tube

Draw Volume: 3 mL (Minimum: 1.2 mL) blood

Processed Volume: 1 mL (Minimum: 0.4 mL) serum

Collection:	Routine blood collection, immediately place specimen on wet ice and send immediately to the lab.
Special Processing:	Lab Staff: Centrifuge specimen at 4 degrees C°, remove serum aliquot into a screw-capped plastic vial and freeze within 20 minutes of collection. Store and ship at frozen temperatures.
Patient Preparation:	N/A
Sample Rejection:	Mislabeled or unlabeled specimens; warm specimens; specimens collected in tubes other than red no gel; contaminated or heat-inactivated specimens.

Interpretive

Reference Range:	≥10%
Critical Values:	N/A
Limitations:	This assay is a functional test and is dependent on correct sampling, storage and shipping conditions. Both degradation by temperature and consumption of complement components will lead to falsely low function results. These are difficult to differentiate from real complement dysregulation. While pre-analytic handling can lead to falsely low results. It is far less likely that it would lead to falsely low function results. These are difficult to differentiate from real complement dysregulation. Complement testing may be ordered in several circumstances where standard treatment includes plasmapheresis or plasma exchange. The procedure itself, if traumatic, may activate complement so may not reflect what is going on with the patient's complement systems. In addition, the plasma exchange may include donor complement proteins. The recommendation is to collect blood prior to the plasma exchange whenever possible. Functional results inconsistent with the clinical history should be verified with a new blood draw. Specimens should be frozen immediately after collection.
Methodology:	Enzyme-Linked Immunosorbent Assay (ELISA)
References:	Mayo Clinic Laboratories January 2022
Updates:	1/10/2022: Moved from forward to ARUP to internal Mayo test. Note change in units and reference range.