MAYO CLINIC LABORATORIES

NEW TEST

Notification Date: September 10, 2024
Effective Date: October 22, 2024

Epstein-Barr Virus Antibody Profile, Serum

Test ID: EBVAB

Useful for:

- Diagnosis of Epstein-Barr virus (EBV) infectious mononucleosis or other EBV related infections
- Identification of prior EBV infection as part of pre-immunosuppression screening
- This assay is **not intended for** viral isolation or identification.

Profile Information:

Test ID	Reporting Name	Available Separately	Always Performed
MEBV	EBV VCA IgM, S	No	Yes
GEBV	EBV VCA IgG, S	No	Yes
NAEBV	EBV NA IgG, S	No	Yes
INTEB	Interpretation	No	Yes

Methods:

MEBV, GEBV, NAEBV: Enzyme-Linked Immunosorbent Assay (ELISA)
INTEB: Technical Interpretation

Reference Values:

Epstein-Barr Virus VIRAL CAPSID ANTIGEN (VCA) IgM ANTIBODY:
Negative

Epstein-Barr Virus VIRAL CAPSID ANTIGEN (VCA) IgG ANTIBODY:
Negative

EPSTEIN-BARR VIRUS NUCLEAR ANTIGEN (EBNA) IgG ANTIBODY:
Negative

Specimen Requirements:

Supplies:	Sarstedt Aliquot Tube, 5 mL (T914)
Preferred Collection Container:	Serum gel
Acceptable Collection Container:	Red top
Submission Container/Tube:	Plastic vial
Specimen Volume:	1 mL
Collection Instructions:	Centrifuge and aliquot serum into a plastic vial.
Minimum Volume:	0.4 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum	Frozen (preferred)	14 days
	Refrigerated	48 hours

Cautions

- Specimens collected too early during the course of the disease may not contain detectable antibodies to Epstein-Barr virus (EBV). Another specimen collected 1 to 2 weeks later may be required.
- Test results should be evaluated in relation to patient symptoms, clinical history, and other laboratory findings.
- The timing of the appearance of IgG antibodies to viral capsid antigen (VCA) or Epstein-Barr nuclear antigen or IgM antibodies to VCA is subject to variations among individuals and serological assays.
- This assay's performance characteristics with immunosuppressed individuals, newborns, cord blood, or matrices other than human serum have not been established.
- Assay performance characteristics have not been established for the diagnosis of nasopharyngeal carcinoma, Burkitt lymphoma, and other EBV-associated lymphomas.
- Anti-VCA-specific IgG may compete with IgM for binding sites, leading to false-negative results. Rheumatoid factor (RF), in the presence of specific IgG, may contribute to false-positive results. The absorbent in the VCA IgM diluent is intended to neutralize the effects of RF and specific IgG. Studies have shown that the absorbent was able to neutralize up to 98% of the activity in a specimen known to contain 3328 IU/mL of RF activity.
- Testing for VCA IgM should not be performed as a screening procedure on the general population. The predictive value of positive or negative results depends on the pretest likelihood of Epstein-Barr-associated disease being present. Testing should only be performed when clinical evidence suggests the diagnosis of this syndrome.

CPT Code:

86664-EBNA
86665 x 2-VCA, IgG and IgM

Day(s) Performed: Monday through Friday

Report Available: Same day/1 to 2 days

Questions

Contact Dunisha Messmer, Laboratory Resource Coordinator at 800-533-1710.