
Lab Dept: Serology

Test Name: PARVOVIRUS B19 IgG/IgM ANTIBODY

General Information

Lab Order Codes: PVS

Synonyms: Parvovirus B 19 Antibodies, IgG and IgM; B19 Antibodies; Fifth Disease; Human Parvovirus B19 Aby

CPT Codes: 86747 x2 – Antibody; parvovirus

Test Includes: Specific testing for IgG and IgM Parvovirus B19 antibodies.

Logistics

Test Indications: Useful for the detection of parvovirus B19 IgG and IgM antibodies to aid in diagnosing erythema infectiosum, parvovirus B19 aplastic crisis, and other parvovirus B19 related diseases.

Lab Testing Sections: Serology - Sendouts

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

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 2 days, test performed Monday - Saturday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Red top tube

Draw Volume: 1.5 mL blood

Processed Volume: 0.5 mL serum

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge and remove serum aliquot. Store aliquot in a screw-capped, round-bottom, plastic vial. Refrigerate serum after separating. Forward promptly.

Patient Preparation: None

Sample Rejection: Specimens other than serum, gross hemolysis, gross lipemia, mislabeled or unlabeled samples

Interpretive

Reference Range: IgG: <0.9

IgM: <0.9

Specimens with an index of <0.9 are considered Negative.

Specimens with an index of >1.1 are considered Positive.

Specimens with an index of 0.9 – 1.1 are considered Inconclusive and will be reported as Equivocal.

| Parvo IgM result | Parvo IgG result | Interpretation |
|-------------------------|---------------------------|---|
| IgM Negative | IgG Negative | Implies no past infection. Patient may be susceptible to B19V infection |
| IgM Negative | IgG Positive | Implies past exposure/infection, minimal risk of B19V infection |
| IgM Equivocal | IgG Positive or Negative | May indicate current of recent B19V infection retest in 1-2 weeks |
| IgM Positive | IgG Positive | Implies current or recent B19V infection |
| IgM Positive | IgG Negative or Equivocal | May indicate current B19V infection retest in 1-2 weeks |

Critical Values: N/A

Limitations:

Specimens drawn prior to seroconversion may yield negative IgM and IgG antibody results, while specimens taken after IgM antibody levels have begun to decline may yield negative IgM antibody results. The results of a single assay or combination of IgM and IgG-enzyme immunoassay results specific for parvovirus, should not preclude additional testing, ie, follow-up specimens from the patient 1 to 4 weeks following the initial test.

Test results of specimens from immunocompromised patients may be difficult to interpret. Testing should not be performed as a screening procedure for the general population. Specimens containing antinuclear antibodies may produce equivocal or positive test results in the IgM assay.

Epstein-Barr virus-positive specimens may produce positive or equivocal test results in the IgM assay.

Methodology:

Sandwich EIA

References:

[Mayo Medical Laboratories Web Page](#) July 2015

Updates:

7/29/2004: Mayo has changed this test procedure to allow for reporting quantitative results effective 7/8/2004. Previously reported as positive or negative.