
Lab Dept: Serology

Test Name: POLIOVIRUS ANTIBODY

General Information

Lab Order Codes: PVIS

Synonyms: Poliovirus Antibody, Neutralization

CPT Codes: 86382 x2 – Neutralization, virus

Test Includes: Poliovirus Type 1 & 3 Antibody, each reported as a titer.

Logistics

Test Indications: Assessing immunity following poliovirus vaccination, as well as determining the poliovirus serotype responsible for recent poliovirus infection. Also serves as an aid for diagnosing immune deficiency disorders.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Clinic Laboratories forward to Quest Diagnostics (MML Test: FPOLO)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 10 days, test set-up Monday and Thursday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Draw Volume: 3 mL (Minimum: 1.5 mL) blood

Processed Volume: 1 mL (Minimum: 0.5 mL) serum

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

Specimen stable refrigerated (preferred) for 14 days, ambient for 5 days, frozen for 30 days.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range: Polio 1 Titer: <1:8
Polio 3 Titer: <1:8

The presence of neutralizing serum antibodies (titers 1:8 up to >1:128) against polioviruses implies lifelong immunity. Some persons without detectable titers (<1:8) may also be immune as demonstrated by elicitation of a secondary-type serum antibody response upon challenge with live polio vaccine.

Critical Values: N/A

Limitations: N/A

Methodology: Culture/Neutralization

References: [Mayo Clinic Laboratories](#) February 2025

Updates: 3/2/2004: Test moved from Lab Corp to MML (forward to Focus Laboratory). Test previously measured IgG antibody and now measure total antibody.
8/20/2012: Updated MML order code and reference range information.
12/16/2013: Method update, previously listed as Complement Fixation.
6/27/2016: Polio Virus 2 is no longer reported per the reference lab.
2/12/2025: Added specimen stability, edited turnaround time and performing lab.