**Lab Dept:** Serology  
**Test Name:** LYME IGG/IGM PANEL, CSF  

### General Information

**Lab Order Codes:** LYMEP (reflex test for LYSC)  
**Synonyms:** Lyme Disease Polyclonal Ig/Spinal Fluid; Antibodies to Borrelia burgdorferi, Cerebrospinal Fluid; Lyme Borreliosis Antibodies, Cerebrospinal Fluid; Lyme Disease Ab, Immunoblot, CSF  
**CPT Codes:** 86617 x2 – Antibody; Borrelia burgdorferi confirmatory test  
**Test Includes:** Test for B. burgdorferi antibodies, IgG and IgM by Western blot technique. Bands will be quantitated when positive.

### Logistics

**Test Indications:** Diagnosis of Lyme disease neuroborreliosis. Western blot confirms presence of antibodies. Weeks to months after infection, meningitis, cranial neuropathy, and radiculoneuropathies may be present.  
**Lab Testing Sections:** Serology - Sendouts  
**Referred to:** Mayo Medical Laboratories (MML Test: CLYWB)  
**Phone Numbers:**  
- MIN Lab: 612-813-6280  
- STP Lab: 651-220-6550  
**Test Availability:** Daily, 24 hours  
**Turnaround Time:** 1 – 4 days, performed Monday - Friday  
**Special Instructions:** N/A

### Specimen

**Specimen Type:** CSF  
**Container:** Sterile plastic vial  
**Draw Volume:** 0.5 mL (Minimum: 0.3 mL) CSF  
**Processed Volume:** Same as Draw Volume
**Collection:** Routine CSF collection

**Special Processing:** Lab Staff: Store specimen in refrigerator. Ship at refrigerated temperatures. Stable 14 days refrigerated. Forward promptly.

**Patient Preparation:** None

**Sample Rejection:** Specimens other than CSF (spinal fluid)

### Interpretive

**Reference Range:** All ages: Negative

Intrathecal synthesis of antibody to Borrelia burgdorferi is indicative of neurological Lyme disease.

**Critical Values:** N/A

**Limitations:** A negative result does not rule out Lyme neuroborreliosis. Results should be interpreted in the context of clinical findings. False-positive results may be caused by breakdown of the blood-brain barrier, or by the introduction of blood into the CSF at collection.

Because clinical studies are limited, the advantage of immunoassays over PCR (or vice versa) has not been conclusively demonstrated for diagnosing central nervous system Lyme disease. If the result for the immunoassay is negative and there is a high suspicion of Lyme neuroborreliosis, consider ordering a PCR method.

**Methodology:** Western blot/Immunoblot/Enzyme linked Immunosorbent Assay (ELISA)

**References:** [Mayo Medical Laboratories](https://www.mayoclinic.org) December 2015

**Updates:**

- 4/22/2004: Test moved from Fairview-University Diagnostic Laboratories forward to ARUP to Mayo Medical Laboratories forward to Focus Technologies.

- 9/28/2005: Test now performed at Mayo Medical Laboratories, no longer forwarded to Focus Technologies.