
Lab Dept: Serology

Test Name: LYME ANTIBODY SCREEN, CSF

General Information

Lab Order Codes: LYSC

Synonyms: Lyme Disease Polyclonal Ig/Spinal Fluid; Antibodies to Borrelia burgdorferi, Cerebrospinal Fluid; Lyme Borreliosis Antibodies, Cerebrospinal Fluid

CPT Codes: 86618 – Borrelia burgdorferi (Lyme disease)
86617 x2 – Antibody; Borrelia burgdorferi, confirmatory, Western blot (If appropriate)

Test Includes: Screening for Lyme disease antibodies, if positive, a “Lyme Disease Antibody Confirmation, Spinal Fluid” (Test CLYWB/83857) will be performed at an additional charge.

Logistics

Test Indications: Diagnosis of Lyme disease neuroborreliosis.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (Test# CLYME/83856, CLYWB/83857)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 4 days

Special Instructions: It is recommended that both Serum and CSF specimen be ordered. See [Lyme Disease Serology Evaluation Refelx, Serum](#).

Specimen

Specimen Type: CSF

Container: Sterile container

Draw Volume: 1 mL (Minimum: 0.5 mL) CSF

Processed Volume:	Same as Draw Volume
Collection:	Routine CSF collection
Special Processing:	Lab Staff: Send specimen refrigerated in a screw-capped, round bottom, plastic vial. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than CSF (spinal fluid); mislabeled or unlabeled specimens

Interpretive

Reference Range:	EIA:	Negative – no antibody to <i>Borrelia burgdorferi</i> detected (Positives confirmed by Western Blot)
	EIA Interpretation: Intrathecal synthesis of antibody to <i>Borrelia burgdorferi</i> is indicative of neurological Lyme disease.	
	Western Blot IgG:	IgG: Negative
	Western Blot IgM:	IgM: Negative
	Western Blot Interpretation: Currently no criteria exists for the interpretation of Western blot testing on CSF. The presence of passive transfer of antibody from blood. Interpretation of Western blot results on CSF is difficult in the absence of results on a corresponding serum specimen.	

Critical Values: N/A

Limitations: A negative result does not rule out Lyme neuroborreliosis. Results should be interpreted in the context of clinic findings. False-positive results may be caused by breakdown of the blood-brain barrier, or by the introduction of blood into the cerebrospinal fluid 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 performing [Lyme Disease PCR, CSF](#).

Methodology: Enzyme Immunoassay (EIA)
Western blot Assay

References: [Mayo Medical Laboratories Web Page](#) September 2012

Updates:

10/11/05: Test no longer forwarded to Focus Technologies, now performed by Mayo Medical Laboratories.

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

6/19/2008: Mayo no longer reports the number of bands present on Western blot testing confirmations.

3/30/2016: Volume requirement increase by MML.