
Reporting Title: Lyme CNS Infection IgG w/ AI Reflex**Performing Location:** Rochester**Ordering Guidance:**

This test should be ordered in patients with suspected neuroinvasive Lyme disease. It is preferred for diagnosis of neuroinvasive Lyme disease over testing of spinal fluid (CSF) by immunoblot for IgM and IgG class antibodies to *Borrelia* species associated with Lyme disease. This test can help distinguish true intrathecal synthesis of antibodies to Lyme disease in the CSF, indicating neuroinvasive infection, versus antibody presence due to passive diffusion through the blood-brain barrier or, possibly, due to blood contamination of the CSF as a result of a traumatic lumbar puncture.

For Lyme testing on serum, order LYME / Lyme Disease Serology, Serum.

Additional Testing Requirements:

Although a small percentage of patients with neuroinvasive Lyme disease may be seronegative, it is recommended that all patients tested by this assay also have standard 2-tiered testing for Lyme disease performed (LYME / Lyme Disease Serology, Serum).

Specimen Requirements:

Both spinal fluid (CSF) and serum are required for this test. CSF and serum must be collected within 24 hours (maximum) of each other.

Specimen Type: Spinal fluid

Container/Tube: Sterile vial

Specimen Volume: 1.2 mL

Collection Instructions:

1. A spinal fluid (CSF) sample of 1.2 mL needs to be collected within 24 hours of the serum specimen, preferably at the same time.
2. Label vial as spinal fluid or CSF.
3. CSF aliquot should be from the second, third, or fourth CSF vial collected during the lumbar puncture. Do not submit CSF from the first vial due to the possibility of blood contamination, which will cause specimen rejection.
4. Band specimens together.

Specimen Type: Serum

Collection Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Submission Container/Tube: Plastic vial

Specimen Volume: 1.2 mL

Collection Instructions:

1. A serum sample of 1.2 mL needs to be collected within 24 hours of the spinal fluid specimen, preferably at the same time.
2. Centrifuge and aliquot serum into a plastic vial.
3. Label as serum.
4. Band specimens together.

Specimen Minimum Volume:

See Specimen Required

Forms:

If not ordering electronically, complete, print, and send Infectious Disease Serology Test Request (T916) with the specimen.

| Specimen Type | Temperature | Time | Special Container |
|---------------|--------------------------|---------|-------------------|
| CSF | Refrigerated (preferred) | 11 days | |
| | Frozen | 35 days | |
| Serum | Refrigerated (preferred) | 11 days | |
| | Frozen | 35 days | |

Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|-----------|-------------------------------|--------------|------|---------|
| LNB1 | Lyme CNS Infection IgG, CSF | Alphanumeric | | 92813-5 |
| LNB2 | Lyme CNS Infection IgG Interp | Alphanumeric | | 69048-7 |
| LNBAS | Lyme CNS Infection IgG, S | Alphanumeric | | 92814-3 |

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

| Test ID | Reporting Name | CPT Units | CPT Code | Always Performed | Orderable Separately |
|---------|------------------------------------|-----------|----------|------------------|----------------------|
| LNBAC | Lyme CNS Infection IgG Screen, CSF | | | Yes | No |
| LNBAS | Lyme CNS Infection IgG, S | | | No | No |

CPT Code Information:

86618

86618 x2 - if applicable

82040 - if applicable
82042- if applicable
82784 x2 - if applicable

Reflex Tests:

| Test ID | Reporting Name | CPT Units | CPT Code | Always Performed | Orderable Separately |
|---------|----------------------------------|-----------|----------|------------------|----------------------|
| LNBAI | Lyme CNS Infection IgG, Ab Index | | | No | No |

Result Codes for Reflex Tests:

| Test ID | Result ID | Reporting Name | Type | Unit | LOINC® |
|---------|-----------|------------------------------|--------------|------|---------|
| LNBAI | LNB3 | Lyme CNS IgG Ab Index Value | Numeric | | 92811-9 |
| LNBAI | LNB4 | Lyme CNS IgG Ab Index Interp | Alphanumeric | | 69048-7 |

Reference Values:

Negative

Reference values apply to all ages.