Overview

Useful For
Evaluation of central nervous system inflammation and B-cell proliferative diseases

Method Name
Nephelometry

NY State Available
Yes

Specimen

Specimen Type
CSF

Specimen Required
Container/Tube: Sterile vial

Specimen Volume: 1 mL

Specimen Minimum Volume
0.5 mL

Reject Due To

| Gross hemolysis | OK |

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSF</td>
<td>Refrigerated (preferred)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Frozen</td>
<td>28 days</td>
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<tr>
<td></td>
<td>Ambient</td>
<td>14 days</td>
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Clinical and Interpretive

Clinical Information
Beta-2-microglobulin (BETA-2-M) is a small membrane protein (11,800 Dalton) associated with the heavy chains of class I major histocompatibility complex proteins and is, therefore, on the surface of all nucleated cells. The small size allows BETA-2-M to pass through the glomerular membrane, but it is almost completely reabsorbed in the proximal tubules.

Increased BETA-2-M levels in the cerebrospinal fluid (CSF) have been shown to be of diagnostic use in non-Hodgkin lymphoma with central nervous system involvement. Elevated CSF:serum ratios seen in patients with aseptic
meningo-encephalitis suggest the possibility of neurologic processes including those associated with HIV infection and acute lymphoblastic leukemia. BETA-2-M measurement in multiple sclerosis seems to be of indeterminate usefulness.

**Reference Values**
0.70-1.80 mcg/mL

**Interpretation**
Elevations of cerebrospinal fluid beta-2-microglobulin levels may be seen in a number of diseases including malignancies, autoimmune disease, and neurological disorders.

**Cautions**
No significant cautionary statements

**Clinical Reference**


**Performance**

**Method Description**
Concentrations of beta-2-microglobulin in cerebrospinal fluid are determined by nephelometry. (Instruction manual: Siemens Nephelometer II Operations. Siemens Inc, Newark, DE 05/2005)
PDF Report
No

Day(s) and Time(s) Test Performed
Monday through Saturday; 3 p.m.

Analytic Time
Same day/1 day

Maximum Laboratory Time
2 days

Specimen Retention Time
14 days

Performing Laboratory Location
Rochester

Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification
This test has been modified from the manufacturer's instructions. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information
82232

LOINC® Information

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<th>Order LOINC Value</th>
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<td>B2MC</td>
<td>Beta-2-Microglobulin, CSF</td>
<td>1951-3</td>
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<table>
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<tr>
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<th>Test Result Name</th>
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