Overview

Useful For
Assessing nutritional status, especially in monitoring the response to nutritional support in the acutely ill patient

Method Name
Nephelometry

NY State Available
Yes

Specimen

Specimen Type
Serum

Advisory Information
This is an immunologic protein measurement. For thyroxine-binding measurement of prealbumin, see TBPE / Thyroxine-Binding Protein Electrophoresis, Serum.

Specimen Required

Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Specimen Volume: 1 mL

Specimen Minimum Volume
0.5 mL

Reject Due To

<table>
<thead>
<tr>
<th>Gross hemolysis</th>
<th>OK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross lipemia</td>
<td>Reject</td>
</tr>
<tr>
<td>Gross icterus</td>
<td>OK</td>
</tr>
</tbody>
</table>

Specimen Stability Information

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

#### Clinical Information
Prealbumin is synthesized in the liver and acts as a binding protein for thyroxine and retinol-binding protein.

The serum concentration of prealbumin reflects the synthesis capacity of the liver and is markedly diminished in malnutrition and other conditions.

Due to its short half-life of approximately 2 days, prealbumin can be used for monitoring the nutritional status and efficacy of parenteral nutrition.

#### Reference Values
- < or =18 years: 12-32 mg/dL
- >18 years: 19-38 mg/dL

#### Interpretation
Results below the reference intervals for adults and pediatric patients may suggest protein depletion.

Clinical correlation recommended with patient status and other nutritional markers.

#### Cautions
No significant cautionary statements

#### Clinical Reference

#### Performance

#### Method Description
In this Siemens Nephelometer II method, the light scattered onto the antigen-antibody complexes is measured. The intensity of the measured scattered light is proportional to the amount of antigen-antibody complexes in the sample under certain conditions. If the antibody volume is kept constant, the signal behaves proportionally to the antigen volume.

A reference curve is generated by a standard with a known antigen content on which the scattered light signals of the samples can be evaluated and calculated as an antigen concentration. Antigen-antibody complexes are formed.
when a sample containing antigen and the corresponding antiserum are put into a cuvette. A light beam is generated with a light emitting diode (LED), which is transmitted through the cuvette. The light is scattered onto the immuno-complexes that are present. Antigen and antibody are mixed in the initial measurement, but no complex is formed yet. An antigen-antibody complex is formed in the final measurement.

The result is calculated by subtracting value of the final measurement from the initial measurement. The distribution of intensity of the scattered light depends on the ratio of the particle size of the antigen-antibody complexes to the radiated wavelength.(Siemens Nephelometer II Operations Instruction Manual, Siemens, Inc., Newark, DE, Version 2.3, 2008; Addendum to the Instruction Manual 2.3, 08/2017)

**PDF Report**

No

**Day(s) and Time(s) Test Performed**

Monday through Friday; Continuously until 3 p.m.

**Analytic Time**

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 cleared, approved or is exempt by the U.S. Food and Drug Administration and is used per manufacturer’s instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

84134

**LOINC® Information**

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<th>Order LOINC Value</th>
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<tbody>
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<td>Preealbumin (PAB), S</td>
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