Overview

Useful For
Detection of cold agglutinins in patients with suspected cold agglutinin disease

Method Name
Titration-Red Cell Agglutination at 4 Degrees C

NY State Available
Yes

Specimen

Specimen Type
Serum Red

Advisory Information
The cold agglutinin test is not specific for *Mycoplasma pneumoniae* and is not recommended to diagnose *M. pneumoniae* infections. See MYCPN / *Mycoplasma pneumoniae* Antibodies, IgG and IgM, Serum.

Specimen Required
Collection Container/Tube: Red top
Submission Container/Tube: Aliquot tube
Specimen Volume: 4 mL
Pediatric Volume: 1 mL

Collections Instructions:
1. Use a warm pack to keep specimen at 37 degrees C prior to and after collecting.
2. Allow specimens to clot at 37 degrees C.
3. Centrifuge at 37 degrees C and separate serum from red cells immediately after blood clots, or within one hour of collection.
4. Do not refrigerate prior to separation of serum from red cells.

Forms
If not ordering electronically, complete, print, and send a Benign Hematology Test Request Form (T755) with the specimen.

Specimen Minimum Volume
1 mL
Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

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 Red</td>
<td>Refrigerated (preferred)</td>
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<tr>
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<td>Ambient</td>
<td></td>
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<tr>
<td></td>
<td>Frozen</td>
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Clinical and Interpretive

Clinical Information

The cold agglutinin titer test is to be used as a tool in the evaluation of suspected cold agglutinin syndrome. In this syndrome, cold agglutinins, usually IgM with anti-I specificity, attach to the patient's erythrocytes causing a variety of symptoms. Symptoms may include chronic anemia due to premature removal of the sensitized erythrocytes from circulation by hemolysis, to acrocyanosis of the ears, fingers, or toes due to local blood stasis in the skin capillaries.

Reference Values
<1:64

Interpretation

Patients with cold agglutinin syndrome usually exhibit a titer value greater than 1:512, with rare cases reportedly as low as 1:64.

Normal individuals often have low levels of cold agglutinins.

The test is not a direct measure of clinical significance and must be used in conjunction with other in vitro and in vivo parameters.

Cautions

Normal individuals may have low levels of cold agglutinins.

Clinical Reference


Performance

Method Description

The titer is determined by making serial doubling dilutions of the patient's serum in 0.9% saline. Group O indicator red cells are added and the serum-cell mixture is then incubated 20 minutes at 0 to 5 degrees C, and the titer endpoint range is determined.(Ellenhorn MJ, Weiner D: Variables in determination of cold hemagglutinins. Am J Clin
Test Definition: CATR
Cold Agglutinin Titer

Pathol 1953;23:1031-1039

PDF Report
No

Day(s) and Time(s) Test Performed
Monday through Friday, Sunday; Continuously

Analytic Time
1 day

Maximum Laboratory Time
3 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
86157

LOINC® Information

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<th>Order LOINC Value</th>
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<td>Cold Agglutinin Titer</td>
<td>14658-9</td>
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