TEST NAME: Cold Agglutinin Titer, Serum - Serology

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

Profile Information

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<td>81174</td>
<td>Screen</td>
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<td>Yes</td>
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<tr>
<td>6168</td>
<td>Titer</td>
<td>No</td>
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Method Name
Titration-Red Cell Agglutination at 4 Degrees C
Screen

Reporting Name
Cold Agglutinin Titer, S

Ordering Mnemonic

Aliases

Specimen Required
Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Specimen is to be maintained at 37C prior to testing.

Note: For diagnosis of Mycoplasma pneumoniae infection, see #85107 "Mycoplasma pneumoniae Antibodies, IgG and IgM, Serum."

Minimum Volume
1 ml

The amount of specimen required to perform an assay once, including instrument and container dead space. Submitting the minimum specimen volume makes it possible to repeat the test or perform confirmatory or perperform reflex testing. In some situations, a minimum specimen volume may result in a QNS (quantity not sufficient) result, requiring a second specimen to be collected.

Transport Temperature
37C

Reject Due To
Hemolysis: No
Lipemia: No
Icteric

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, from chronic anemia due to premature removal of the acrocyanosis of the ears, fingers, or toes due to local blood stasis in the skin capillaries.

**Reference Values**
SCREEN: Negative -- if positive, result are titered
TITER: <1:64

**Interpretation**
Screen:
- Negative (no cold agglutinin detected)
- Positive (cold agglutinin detected, titer results will be reported)

Titer:
- Patients with cold agglutinin syndrome usually exhibit a titer value >1:512, with rare cases reportedly as low as 1:64.
- Normal individuals often have low levels of cold agglutinins

This 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 level of cold agglutinins. The cold agglutinin test is not specific for *Mycoplasma pneumoniae* infections. See #85107 "Mycoplasma pneumoniae Antibodies, IgG and IgM, Serum"

**Clinical Reference**

**Method Description**
A screen will be performed on all specimens first to identify most of those with titer values in the normal ranges. If the screen is negative, no titration will be performed and the screen will be reported as negative. If the screen is positive, a titer will be performed and the screen will be reported as positive.

The titer determination by making a serial doubling dilutions of the patient's serum in 0.9% saline. Group O indicator red cells are added (or the patient's own red cells) are added and the serum cell-cell mixture is the incubated 4 hours at 0 degrees C to 5 degrees C, and the titer end point range is determined.

**Day(s) and Time(s) Test Performed**
Monday through Friday - 6am to 3pm, Saturday and Sunday 6am to 10am)

**Maximum Laboratory Time**
3 days

**Specimen Retention Time**
See individual Unit Codes

**List Fee**

**CPT Code Information**
86156/Screen
86157/Titer (if appropriate)