Test Definition: CATTR

Cold Agglutinin Titer, Serum

Overview

Useful For

Detection of cold agglutinins in patients with suspected cold agglutinin disease

This test is **not recommended** to diagnose *Mycoplasma pneumoniae* infections.

Method Name

Titration/Red Cell Agglutination

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Ordering Guidance

The cold agglutinin test is not specific for *Mycoplasma pneumoniae* and is not recommended to diagnose *M pneumoniae* infections. To diagnose *M pneumoniae* infections, order MPRP / *Mycoplasma* (*Mycoplasmoides) pneumoniae* with Macrolide Resistance Reflex, Molecular Detection, PCR, Varies. For screening recent or past exposure to *M pneumoniae*, order MYCO / *Mycoplasma pneumoniae* Antibodies, IgG and IgM, Serum.

Specimen Required

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)
Collection Container/Tube: Red top
Submission Container/Tube: Plastic vial
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 specimen to clot at 37 degrees C.
3. Centrifuge at 37 degrees C and aliquot serum into plastic vial 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 an Benign Hematology Test Request (T755) with the specimen.

Specimen Minimum Volume

1 mL

Reject Due To

Gross hemolysis	OK
Gross icterus	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum Red	Refrigerated (preferred)	7 days	
	Ambient	72 hours	
	Frozen	7 days	

Clinical & 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
Titer results:
>64: Elevated
>1000: May be indicative of hemolytic anemia

Interpretation
Titers above 64 are considered elevated, but hemolytic anemia resulting from cold-reactive autoagglutinins rarely occurs unless the titer is 1000 or above. Titers below 1000 may be obtained when the autoantibody has a different specificity (eg, anti-i) or if the cold agglutinin is of the less-common low-titer, high-thermal-amplitude type.

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
Cohn CS, Delaney M, Johnson ST, Katz LM, Schwartz J. eds: Technical Manual. 21st ed. AABB; 2023

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 60 to 120 minutes at 2 to 8 degrees C. The titer end point range is determined by hemagglutination.(Cohn CS, Delaney M, Johnson ST, Katz LM, Schwartz J. eds: Technical Manual. 21st ed. AABB; 2023)

PDF Report

No

Day(s) Performed

Monday through Friday, Sunday

Report Available

1 to 3 days

Specimen Retention Time

14 days

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Main Campus

Fees & 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 account representative. For assistance, contact Customer Service.

Test Classification

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

86157

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
CATTR	Cold Agglutinin Titer	14658-9

Result ID	Test Result Name	Result LOINC® Value
CATTR	Cold Agglutinin Titer	In Process