

## 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