Test Definition: ATR

Isoagglutinin Titer, Anti-A, Serum

Overview

Useful For

Evaluation of individuals with possible hypogammaglobulinemia

Investigation of suspected roundworm infections

Method Name

Hemagglutination

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Shipping Instructions

Specimen must arrive within 10 days of collection.

Specimen Required

Supplies: Sarstedt Aliquot Tube, 5mL (T914)
Collection Container/Tube: Red top
Submission Container/Tube: Plastic vial
Specimen Volume: 2.5 mL
Pediatric Volume: 2 mL
Collection Instructions: Centrifuge and aliquot serum into a plastic vial.

Forms

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

Specimen Minimum Volume

1 mL

Reject Due To

Gross hemolysis	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum Red	Ambient (preferred)	4 days	
	Refrigerated	10 days	
	Frozen	10 days	

Clinical & Interpretive

Clinical Information

Isoagglutinins are antibodies produced by an individual that cause agglutination of red blood cells (RBCs) in other individuals. People possess isoagglutinins directed toward the A or B antigen absent from their own RBCs. For example, type B or O individuals will usually possess anti-A. The anti-A is formed in response to exposure to A-like antigenic structures found in ubiquitous non-RBC biologic entities (eg, bacteria).

Isoagglutinins present in the newborn are passively acquired from maternal circulation. Such passively acquired isoagglutinins will gradually disappear, and the infant will begin to produce isoagglutinins at age 3 to 6 months.

Isoagglutinin production may vary in patients with certain disease conditions. Decreased levels of isoagglutinins may be seen in patients with acquired and congenital hypogammaglobulinemia and agammaglobulinemia. Some individuals with roundworm infections will have elevated levels of anti-A.

Reference Values

Interpretation depends on clinical setting. No defined reference values.

Interpretation

The result is reported as antiglobulin phase, in general representing IgG antibody. The result is the reciprocal of the highest dilution up to 1:1024 at which macroscopic agglutination (1+) is observed. Dilutions above 1:1024 are reported as greater than 1024.

Cautions

Decreased isoagglutinin titers may be seen in normal older adults and in children aged 12 months or younger.

This test will not be performed for individuals with blood type A or AB.

Clinical Reference

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

Performance

Method Description

Two-fold serial dilutions of patient's serum sample are tested with appropriate type A and B erythrocytes. Antiglobulin phase of reactivity is examined. The result is the reciprocal of the highest dilution at which macroscopic agglutination (1+) is observed up to greater than 1024. Parallel titration of control antiserum is used for standardization.(Cohn CS, Delaney M, Johnson ST, Katz LM, Schwartz J. eds: Technical Manual. 21st ed. AABB; 2023)

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PDF Report
No

Day(s) Performed
Monday through Friday, Sunday

Report Available
1 to 4 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 has been cleared, approved, or is exempt by the US 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
86886

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
ATR	Isoagglutinin Titer, Anti-A	38358-8

Result ID	Test Result Name	Result LOINC® Value
ATR	Isoagglutinin Titer, Anti-A	In Process