
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: Aliquot Tube, 5 ml (T465)

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 plastic vial

Forms

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

Reject Due To

Gross hemolysis OK

Specimen Minimum Volume

1 mL

Specimen Stability Information

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

Clinical & Interpretive**Clinical Information**

Isoagglutinins are antibodies produced by an individual that cause agglutination of red blood cells (RBC) in other individuals. People possess isoagglutinins directed toward the A or B antigen absent from their own RBC. 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-red blood cell 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 3 to 6 months of age.

Isoagglutinin production may vary in patients with certain pathologic 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 elderly individuals and in children 12 months and younger.

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

Clinical Reference

Fung MK, Eder AF, Spitalnik SL, Westhoff CM: Technical Manual. 19th ed. AABB; 2017

Performance**Method Description**

Two-fold serial dilutions of patient's serum 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.(Fung MK, Eder AF, Spitalnik SL, Westhoff CM: Technical Manual. 19th ed. AABB; 2017)

PDF Report

No

Specimen Retention Time

14 days

Performing Laboratory Location

Rochester

Fees & Codes**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	Reporting Name	LOINC®
ATR	Isoagglutinin Titer, Anti-A	38358-8