MAYO CLINIC LABORATORIES

Test Definition: BTR

Isoagglutinin Titer, Anti-B

Overview

Useful For
Evaluation of individuals with possible hypogammaglobulinemia

Method Name
Hemagglutination

NY State Available
Yes

Specimen

Specimen Type
Serum Red

Shipping Instructions
Specimen must arrive within 10 days of draw.

Specimen Required
Container/Tube: Red top
Submission Container/Tube: Serum Aliquot tube
Specimen Volume: 2.5 mL
Pediatric: 2 mL

Forms
If not ordering electronically, complete, print, and send a Benign Hematology Test Request Form (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 RBCs in other individuals. People possess isoagglutinins directed toward the A or B antigen absent from their own RBCs. For example, type A or O individuals will usually possess anti-B. The anti-B is formed in response to exposure to B-like antigenic structures found in ubiquitous non-red 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.

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 >1024.

Cautions

Decreased isoagglutinin titers may be seen in normal elderly individuals and in children 12 months or younger.
This test will not be performed for individuals with blood type B or AB.

Clinical Reference

AABB Technical Manual. 19th edition. Edited by MK Fung, AF Eder, SL Spitalnik, CM Westhoff: AABB 2017

Performance

Method Description

Twofold 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.(AABB Technical Manual. 18th edition. Edited by MK Fung, BJ Grossman, CD Hillyer, CM Westhoff: AABB. 2014)

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