

Overview

Useful For

Monitoring antibody levels during pregnancy to help assess the risk of hemolytic disease of the newborn
This test is **not useful** for monitoring the efficacy of Rh-immune globulin administration.

Testing Algorithm

If the antibodies detected are too weakly reactive to titer, the Antibody Titer test will be canceled and replaced by the Antibody Identification test (ABIDR).

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
ABIDR	Antibody Identification, RBC	Yes	No

Method Name

Hemagglutination

NY State Available

Yes

Specimen

Specimen Type

Varies

Shipping Instructions

Specimen must arrive within 72 hours of draw.

Specimen Required

Both blood and serum are required.

Specimen Type: Blood

Collection Container/Tube: 6-mL PINK-top (EDTA)

Submission Container/Tube: Aliquot tube

Specimen Volume:

3 mL plasma

3 mL RBCs

Collection Instructions: Spin down and separate plasma from cells. Send both tubes.

Specimen Type: Serum

Collection Container/Tube: 10-mL Red top

Submission Container/Tube: Aliquot tube

Specimen Volume:

5 mL serum

5 mL RBCs

Collection Instructions: Spin down and separate serum from clot. Send both tubes.

Reject Due To

No specimen should be rejected.

Specimen Minimum Volume

Blood: 6 mL EDTA

Pediatric: 2 mL serum

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Ambient (preferred)	4 days	
	Refrigerated	4 days	

Clinical & Interpretive**Clinical Information**

Some maternal IgG alloantibodies to red blood cell antigens will cross the placenta and cause hemolysis of antigen-positive fetal red cells. The resulting fetal anemia and hyperbilirubinemia can be harmful or even fatal to the newborn.

Reference Values

Negative,

If positive, result will be reported as the reciprocal of the highest dilution at which macroscopic agglutination (1+) is observed.

Interpretation

The specificity of the maternal alloantibody will be stated. The titer result is the reciprocal of the highest dilution at which macroscopic agglutination (1+) is observed.

If the antibody problem identified is not relevant in hemolytic disease of the newborn or if titrations are not helpful, the titer will be canceled and will be replaced by ABIDR / Antibody Identification, RBC.

A consultation service is offered, at no charge, regarding the clinical relevance of red cell antibodies.

Cautions

Recent administration of Rh-immune globulin may cause anti-D to be identified and appear falsely as an alloantibody.

Clinical Reference

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

Performance**Method Description**

The strength and specificity of the antibody to be titered is first determined. Two-fold serial dilutions of serum are

tested against antigen-positive erythrocytes. The result is the reciprocal of the highest dilution at which macroscopic agglutination (1+) is observed at the antihuman globulin phase of testing. Parallel titration of a previous specimen of the patient's serum (frozen) provides a baseline for comparison of antibody level. In the absence of a previous specimen from the patient, parallel titration of a control antiserum is used for standardization. (AABB Technical Manual, 19th edition. Edited by MK Fung, AF Eder, SL Spitalnik, CM Westhoff. 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-Antibody titer

86870-Antibody Identification (if appropriate-per panel tested)

86860-Antibody elution (if appropriate)

86880 x 3-Antigloblin, direct (if appropriate)

86905-Each red cell antigen typing (if appropriate)

86978-Adsorption, each (if appropriate)

81403-Human Erythrocyte Antigen (if appropriate)-Internal only