MAYO CLINIC LABORATORIES

Test Definition: ABIDR

Antibody Identification, RBC

Overview

Useful For

Assessing positive pretransfusion antibody screens, transfusion reactions, hemolytic disease of the newborn, and autoimmune hemolytic anemias

This test is **not useful** for monitoring the efficacy of Rh-immune globulin administration.

This test is **not useful** for identifying antibodies detected only at 4 degrees C or only after extended room temperature incubation.

Additional Tests

Test Id	Reporting Name	Available Separately	Always Performed
STTX26	Antibody Panel	No	Yes

Testing Algorithm

The following tests may also be ordered and performed as part of antibody identification: Direct Antiglobulin Test (Poly) and its reflexes and Special Red Cell Antigen Typing. Additional reflex charges will be added for Antibody Elution, Antibody Adsorption, Antibody Panels and Special Red Cell Antigen Typings.

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
DCTR	Direct Antiglobulin Test (Poly)	Yes	No
SPAGR	Special Red Cell Ag Typing	Yes	No
HEA	Human Erythrocyte Antigen	No	No
STTX25	Antibody Elution	No	No
STTX31	Antibody Adsorption	No	No
STTX32	Red Cell Antigen Typing	No	No

Method Name

Hemagglutination

NY State Available

No

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:

1. Spin down and separate plasma from cells. Send both tubes.
2. Label specimen as EDTA plasma.

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:

1. Spin down and separate serum from clot. Send both tubes.
2. Label specimen as serum.

Reject Due To

Gross hemolysis	OK

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

After exposure to foreign red blood cells via transfusion or pregnancy, some people form antibodies that are capable of the destruction of transfused red cells or of fetal red cells in utero. It is important to identify the antibody specificity in order to assess the antibody's capability of causing clinical harm and, if necessary, to avoid the antigen on transfused red blood cells.

Autoantibodies react against the patient's own red cells as well as the majority of cells tested. Autoantibodies can be clinically benign or can hemolyze the patient's own red blood cells, such as in cold agglutinin disease or autoimmune hemolytic anemia.

Reference Values
Negative,
If positive, antibodies will be identified and corresponding special red cell antigen typing on patient’s red blood cells will be performed.

Interpretation
Specificity of alloantibodies will be stated.
The patient's red blood cells will be typed for absence of the corresponding antigens or as an aid to identification in complex cases.
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. 18th edition. Edited by MK Fung, BJ Grossman, CD Hillyer, CM Westhoff. AABB, 2014

Performance

Method Description
A panel of reagent type O erythrocytes, with known antigenic determinants and the patient's cells are tested with the patient's serum/plasma. This panel should yield a distinct pattern of agglutination or hemolysis that identifies the auto- or alloantibody specificity. Elution, absorption, neutralization, and other special techniques may be necessary to complete antibody identification.(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

86870-Antibody Identification (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