Test Definition: ABIDR

Antibody Identification, Blood and Serum

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.

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
ABIDR	Antibody Identification, RBC	Yes	No
DC3TR	Direct Antiglobulin Test (C3)	No	No
DIGTR	Direct Antiglobulin Test (IgG)	No	No
DATR	Direct Antiglobulin Tst (Poly)	No	No
ABTIR	Antibody Titer, RBC	Yes	No
STTX25	Antibody Elution	No, (Bill Only)	No
STTX31	Antibody Adsorption	No, (Bill Only)	No
STTX32	Red Cell Antigen Typing	No, (Bill Only)	No

Additional Tests

Test Id	Reporting Name	Available Separately	Always Performed
STTX26	Antibody Panel	No, (Bill Only)	Yes

Testing Algorithm

The following tests may be ordered and performed (at an additional charge) as needed for antibody identification: direct antiglobulin testing (polyspecific), including its reflex tests and special red blood cell antigen typing.

If certain antibodies are detected and the patient is known to be pregnant, an antibody titration will be performed at an additional charge.

Method Name
Hemagglutination

NY State Available
Yes

Specimen

Specimen Type
Varies

Shipping Instructions
Specimen must arrive within 72 hours of collection.

Specimen Required
Both blood and serum are required.

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)

Specimen Type: Plasma/Blood
Collection Container/Tube: 6-mL Pink-top (EDTA)
Submission Container/Tube: Plastic vial
Specimen Volume:
3 mL Plasma
3 mL Red blood cells (RBCs)
Collection Instructions:
1. Centrifuge and aliquot plasma into a plastic vial.
2. Label specimen as EDTA plasma or EDTA RBCs as appropriate.
3. Send both tubes.

Specimen Type: Serum/Blood
Collection Container/Tube: 10-mL Red top
Submission Container/Tube: Plastic vial
Specimen Volume:
5 mL Serum
5 mL RBCs
Collection Instructions:
1. Centrifuge and aliquot serum into a plastic vial.
2. Label specimen as serum or clotted RBCs as appropriate.
3. Send both tubes.

Specimen Minimum Volume
Blood: 6 mL in EDTA; Pediatric: 2 mL Serum

Reject Due To

Gross hemolysis	OK

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

Autoantibodies react against the patient's own RBCs as well as the majority of cells tested. Autoantibodies can be clinically benign or can hemolyze the patient's own RBCs, 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

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

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

PDF Report
No

Day(s) Performed
Monday through Friday, Sunday

Report Available
1 to 5 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
86870
86860-(if appropriate)
86886-(if appropriate)
86880 x 3 (if appropriate)
86905-(if appropriate)
86978-(if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value

ABIDR	Antibody Identification, RBC	888-8

Result ID	Test Result Name	Result LOINC® Value
ABDR1	Antibody Identification, RBC	888-8