

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 |