

Overview

Useful For

Detection of allo- or autoantibodies directed against red blood cell antigens in the settings of pretransfusion testing

Evaluation of transfusion reactions

Evaluation of hemolytic anemia

Reflex Tests

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

Testing Algorithm

If the antibody screen is positive, then antibody identification will be performed.

If the patient has a history of antibodies that are still detected, the antibody screen will be canceled and replaced by the antibody identification.

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

Method Name

Hemagglutination

NY State Available

No

Specimen

Specimen Type

Whole Blood EDTA

Shipping Instructions

Specimen must arrive within 72 hours of collection.

Specimen Required

Container/Tube: Pink top (EDTA)

Specimen Volume: 6 mL
Collection Instructions: Send whole blood specimen in original tube. **Do not aliquot.**

Forms

If not ordering electronically, complete, print, and send a [Benign Hematology Test Request Form](#) (T755) with the specimen.

Specimen Minimum Volume
3 mL

Reject Due To

Gross hemolysis	Reject
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Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Whole Blood EDTA	Refrigerated (preferred)	4 days	
	Ambient	4 days	

Clinical & Interpretive

Clinical Information

Transfusion and pregnancy are the primary means of sensitization to red cell antigens. In a given population, 2% to 4% of the general population possess irregular red cell alloantibodies. Such antibodies may cause hemolytic disease of the newborn or hemolysis of transfused donor red blood cells.

Reference Values

Negative
If positive, antibody identification will be performed.

Interpretation

A positive result (antibody detected) necessitates antibody identification to establish the specificity and clinical significance of the antibody detected.

Alloantibodies detected on pregnant Mayo Clinic-Rochester patients will be evaluated for the allo-antibody titer. If antibody reacts strongly, the titre test will be performed.

Negative results indicate no antibody was detected.

Cautions

Clinical evaluation of antibodies identified is necessary to determine their potential for harm to the patient at this time and to assess appropriate action to be taken in the future.

Clinical Reference

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

Performance

Method Description

Three type O erythrocytes with known expression of common antigenic determinants are utilized. Serum containing antibodies directed against these antigens will cause agglutination or hemolysis of the test cells. Antiglobulin phases of testing provide optimal conditions for detection of most clinically significant antibodies. If the antibody screen is positive, then antibody identification is performed.(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 Sunday

Report Available

Same day/1 to 2 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

Test Definition: ABYSR

Antibody Screen with Reflexed Antibody
Identification, Blood

86850

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
ABYSR	Antibody Screen, RBC	101678-1

Result ID	Test Result Name	Result LOINC® Value
ABYSR	Antibody Screen, RBC	890-4