



Laboratory Service Manual

Lab Dept: Transfusion Services

Test Name: ANTIBODY SCREEN

General Information

Lab Order Codes: DCAS or TYAS (Direct Coombs/Antibody Screen or Type and Antibody Screen)

Synonyms: Coombs - Indirect, IAT, Indirect Antiglobulin Test, Antiglobulin test-Indirect, Indirect Coombs; Type and Screen; Direct Coombs/Antibody Screen

CPT Codes: 86850 – Screen
86870 – Identification

Test Includes: Screen for unknown antibodies in plasma/serum by use of known red cells. Additional testing may be done if unexpected antibody(s) are detected. Refer to [Antibody Identification, Red Cells](#)

Logistics

Test Indications: To screen for unexpected antibodies in pretransfusion testing and to evaluate potential cause of hemolysis.

Lab Testing Sections: Transfusion Services

Phone Numbers:

Minneapolis: 612-813-6824

Saint Paul: 651-220-6558

Test Availability: Daily, 24 hours

Turnaround Time: 1 hour, longer if unexpected antibodies are detected.

Special Instructions: Additional specimen may be requested if Antibody Identification is indicated.

Specimen

Specimen Type: Whole blood



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Container:	Lavender top (EDTA) tube Alternate: Red top tubes will be accepted, but will delay specimen processing to allow for clotting. (SST tubes are Not acceptable.)
Draw Volume:	2 – 6 mL blood
Collection:	All specimens submitted to the Transfusion Service must be appropriately labeled at bedside with the time and date of collection, and the signature of the individual collecting the specimen. A completed order, either through the HIS or general requisition must accompany each specimen. It is not always necessary to collect a new sample prior to the provision of blood for patients. Consult with the Transfusion Service prior to collecting additional samples if status unknown.
Special Processing:	Lab Staff: Refrigerate specimen
Patient Preparation:	Refer to Collection of Patient Specimens for full details. The patient must be positively identified when the specimen is collected. The label on the blood specimen must correspond with the identification on the patient's Medical Records band (or ED ID) and on the physician's/practitioner's orders. The specimen must be timed, dated and signed by the phlebotomist at bedside.
Sample Rejection:	Gross hemolysis, sample placed in a serum separator tube, specimen tube not properly labeled

Interpretive

Reference Range:	Negative
Limitations:	Abnormal proteins and cold agglutinins may interfere and cause delays in interpretation. Test will not detect all antibodies (e.g., antibodies in low titer, antibodies to low-incidence antigens). In some instances of autoimmune hemolytic anemia, the antibody may be completely adsorbed into the erythrocytes and not detectable by the indirect antiglobulin test.
Methodology:	Hemagglutination, tube. Antiglobulin test
Contraindications:	N/A
References:	Snyder EL and Spivack M (1979) Clinical and serological management of patients with methyl dopa-indices positive antiglobulin tests. Transfusion 19:313-6 Brecher M, Technical Manual, Current Edition, Bethesda MD, AABB