

Immunoematology Testing

Sample Requirements:

Red Cell Antibody / ABO Discrepancy Investigations:

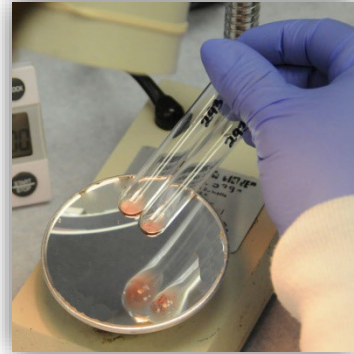
- 4 EDTA tubes – 7 mL

Other Abbreviated Tests (DAT / Eluate / Labor-Delivery):

- 2 EDTA tubes – 7 mL

HDN Investigation:

- 2 EDTA tubes – 5 mL from mother
- cord blood sample or 3 EDTA microtainers from baby



**Improperly labeled samples will not be processed.*

Please note: ABO/Rh confirmation will be performed on all serological test requests.

Additional testing required to resolve a type discrepancy will be automatically performed by IRL.

	Test Requested	Testing To Include the Following
	Full Antibody ID	ABORh, Gel/PeG antibody screens, DAT, antibody ID panels, applicable chemicals used for ID, eluate, or adsorption when appropriate.
Transfusion Recommendations Not Included.	ABO Discrepancy Resolution	ABORh and techniques such antibody identification, adsorption, etc used to resolve the discrepancy.
	Labor / Delivery	Use for L/D patients only. Applicable antibody panels or screens, adsorptions, etc associated with request.
	Antigen Type ONLY	Requested antigen typing.
	Direct Antiglobulin Test	IgG and C3 DAT performed. Elution will be performed if indicated or requested by hospital.
	Elution	IgG and C3 DAT for confirmation. Eluate testing and adsorption, if applicable.
	HDN-Baby Workup	DAT (IgG ONLY) and eluate. Will include transfusion recommendations IF mother's specimen is submitted to the Blood Center for antibody testing.
	HDN-Mother Workup	Basic antibody identification. Verification of the mother's antibody results are used for interpretation in the baby's transfusion recommendations.
	Prenatal Workup	Brief antibody confirmation and antibody titer if indicated.

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Test / Service	Explanation
ABORh	A confirmation ABORh will be performed on every serological and platelet antibody workup.
Type Discrepancy	Additional testing or techniques performed to resolve blood type discrepancies. Antibody identification may be required to resolve certain discrepancies.
Antibody Screen	A room temperature screen may be performed to determine if a cold autoantibody could be interfering with routine testing. A screen using PeG enhancement will be used to determine where the antibody(ies) are reacting and if a PeG adsorption is appropriate when performing an adsorption.
Antibody ID Panel	Antibody identification panels will routinely be performed using gel as the primary identification method. Antibody panel cells may be used from various vendors and with different potentiators or chemicals.
Large Inventory of Rare Unlicensed Anti-Sera and RBCs	Rare anti-sera and RBCs are required for the IRL per standard 2.2 A/B. These resources are available to identify rare antibodies in patients as well as antigen type donor units to transfusion.
Antibody Titer	Performed on prenatal specimens with an alloantibody identified. Current titer result and previously reported titer result, if applicable will be reported.
Autoadsorption (PeG/Untreated)	Autoadsorption technique used to remove autoantibody only on patients that have not been transfused within the last 3 months.
Allogeneic Adsorption (ZZAP/Untreated/PeG)	Allogeneic or Differential adsorption techniques require the use of rare donor units with a specific phenotype. Allogeneic/Differential adsorptions are often used to adsorb a panreactive antibody or to isolate multiple antibodies in recently transfused patients. The method of adsorption performed will be dependent on antibody reactivity, patient history, and tech decision.
RESt Adsorption	Adsorption technique using rabbit erythrocyte stroma may be performed during an antibody investigation that involved a cold autoantibody.
EGA Treatment of RBCs	EGA treatment gives the ability to differentiate between autoantibodies and clinically significant high-frequency antibodies. EGA treated RBCs can also be used to phenotype the patient in special AHG antigen typing tests.
DTT Treatment of RBCs	DTT treatment is an essential chemical used to aid in the classification of alloantibodies. Frequently used to mitigate drug interference such as Daratumumab.
Chemical Treatment of Plasma	Test used to destroy IgM antibodies while IgG antibodies remain intact by utilizing a specific concentration of the chemical DTT. Important to determine clinical significance of a maternal antibody and assessing HDN risk.
Enzyme Treatment of RBCs	Allows for differentiation of multiple antibodies, as well as aiding in the classification of low and high frequency antibodies. Papain, Trypsin and Ficin are available.
Le Neutralization	Test method that may be used during an antibody investigation to assist with confirmation of Lewis antibodies.
P1 Neutralization	Test method that may be used during an antibody investigation to assist with confirmation of P1 antibodies.
Plasma Neutralization	Test method that may be used during an antibody investigation to assist with confirmation of Chido/Rogers antibodies.

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Direct Antiglobulin Test	Each antibody ID specimen routinely receives two DAT's. One anti-IgG DAT performed in gel and one anti-C3 DAT performed in tube. An additional IgG DAT may be performed during an autoantibody investigation.
Super DAT	Super/enhanced DAT can be used for the diagnosis of AIHA, HDN, or a transfusion reaction when the traditional DAT is negative, but the clinician still suspects a hemolytic anemia. <i>Performed upon request only.</i>
Antibody Elution	Performed on samples with a positive DAT or positive autocontrol to determine if and what antibody is coating the patient's cells.
Retic Separation	Technique used to separate autologous cells from the transfused, donor cells for the purpose of antigen typing and confirmation of warm autoantibody. Will be performed if performing warm autoantibody confirmation or antigen typing and patient transfused in less than 3 months.
Sickle Cell Separation	Technique used to separate autologous cells of a sickle cell patient from the transfused, donor cells for the purpose of antigen typing and confirmation of a warm autoantibody. Will be performed if performing warm autoantibody confirmation or antigen typing and patient transfused in less than 3 months.
IS Crossmatch	Crossmatch test testing to ensure patient compatibility before units are delivered. These test codes will only be used when the Blood Center is considered the Transfusion Service or provide crossmatch of record services.
AHG Crossmatch	
Compatibility Check	Crossmatches may be requested by the hospital / transfusing facility to ensure patient compatibility before units are delivered by the Blood Center. <i>(All crossmatches must be repeated by the hospital / transfusing facility.)</i>
Antigen Screen with Patient Plasma	May be performed by the testing technologist in an effort to locate compatible products or verify compatibility when a patient has an antibody of undetermined specificity or in other applicable situations.
HGB S Negative Screen	Used to test donor units for hemoglobin S for transfusion of Sickle Cell Disease patients.
RBC Molecular Phenotype	The RBC Molecular Phenotype should be performed on all Warm Autoantibody, HTLA antibody, and Sickle Cell Disease patients. It provides a complete phenotype including many high and low frequency antigens. <i>*Springfield IRL location only.</i>
RHD Variant	Detects alteration in RHD gene resulting in partial or weak expression of RhD antigen. Valuable in resolving D typing discrepancy in pregnant women to accurately guide transfusion and Rh immune globulin prophylaxis. <i>*Springfield IRL location only.</i>
RHCE Variant	Detects variants in RHCE gene resulting in partial expression of C, c, E, e antigens. Useful in resolving C, c, E, e discrepancy to differentiate auto vs allo-Rh antibodies and avoid serious hemolytic transfusion reactions. <i>*Springfield IRL location only.</i>
PakLx <i>Platelet Antibody Screen</i>	Platelet antibody investigations will begin with this qualitative test to detect the presence or absence of HPA and HLA antibodies. Additional antibody identification testing is required and will be reflexed by IRL when an HLA antibody is detected. <i>*Springfield IRL location only.</i>

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HLA Antibody ID	Once an HLA antibody is detected in the PakLx, the HLA Antibody ID is performed to identify the antibodies present. A PRA (Percent Reactive Antibody) will be provided in the report and correlates with the ability to find compatible products. The higher the PRA, the more difficult locating compatible platelets will be. <i>*Springfield IRL location only.</i>
Capture - P <i>Platelet Crossmatch</i>	Depending on the patient's PRA, platelet crossmatching may be performed by the solid phase adherence test (Capture-P). The Capture-P test is relatively quick to perform and allows us to provide suitable products to patients in need. <i>*Springfield IRL location only.</i>
HLA-A, HLA-B Molecular Phenotype	The HLA molecular phenotype is performed on patients with an HLA antibody. This test is also performed on our platelet donors to build a database so HLA matched products may be provided. <i>*Springfield IRL location only.</i>
HPA Molecular Phenotype	The HPA molecular phenotype is performed on patients with an HPA antibody. This test is also performed on our platelet donors to build a database so HPA matched products may be provided. <i>*Springfield IRL location only.</i>
HLA or HPA Match / Mismatch Platelets	HLA and/or HPA matched / mismatched platelet products are available for known refractory patients. Matched or mismatched platelets will likely require several days' notice to recruit compatible donors and allow testing and processing of the product to be completed.
Saline Washed Red Blood Cells and Platelets	Process performed to RBC or Platelet products to remove unwanted plasma and plasma proteins, metabolic waste products, micro-aggregates and anticoagulant that may cause an adverse reaction. <i>*Springfield IRL, St. Louis, and Davenport can wash RBCs and PLTs. *Peoria can wash PLTs Only.</i>
Frozen / Deglycerolized Red Cells	Ability to freeze and deglycerolize phenotypically rare RBC units for alloimmunized patients that are difficult to locate blood for. <i>*Springfield IRL location only.</i>

** If your closest IRL site does not perform a procedure mentioned above, specimens will be routed (based on order priority) to the closest ImpactLife IRL that performs the test.*