

Immunoematology Services Available

Sample Requirements:

Red Cell Antibody Investigation:

- 4 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.*

Immunoematology Samples Submitted to MVRBC	
Test Requested	Testing To Include the Following
Full Antibody ID	ABO/Rh, RT/PeG antibody screens, DAT, antibody ID panels, applicable chemicals used for ID, eluate or adsorption when appropriate.
Abbreviated Antibody ID	ABO/Rh, applicable antibody panels or screens, adsorptions, etc associated with request. Will NOT include transfusion recommendations.
Prenatal Workup	ABO/Rh, brief antibody confirmation and antibody titer. Will NOT include transfusion recommendations.
Antigen Type ONLY	ABO/Rh confirmation, requested antigen typing. Will NOT include transfusion recommendations.
Direct Antiglobulin Test ONLY	ABO/Rh confirmation. Will include elution depending on DAT result. Will NOT include transfusion recommendations.
Eluate Workup ONLY	ABO/Rh confirmation, DAT, eluate and adsorption, if applicable. Will NOT include plasma antibody testing or transfusion recommendations.
HDN-Baby Workup	ABO/Rh confirmation, DAT (IgG ONLY) and eluate. Will include transfusion recommendations IF mother's specimen is submitted to MVRBC for antibody testing.
HDN-Mother Workup	ABO/Rh confirmation, basic antibody identification. Will NOT include transfusion recommendations for the mother. Verification of the mother's antibody results are used for interpretation in the baby's transfusion recommendations.

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Service Provided	Explanation
ABO / Rh	A confirmation ABO/Rh is performed on every serological and platelet antibody workup.
Antibody Screen	Two antibody screens are routinely performed at MVRBC. A room temperature screen is performed to help determine if a cold autoantibody could be interfering with routine testing. And a screen using PeG enhancement is performed which helps determine where the antibody(ies) are reacting and if a PeG adsorption will work when an adsorption is required.
Antibody ID Panel	One antibody panel is generally 10-12 panel cells and charged based on the number of testing cells or full panels performed during the specimen workup. MVRBC routinely performs antibody identification panels in the gel method as the primary identification method. Antibody panel cells may be used from various vendors.
Large Inventory of Rare Unlicensed Anti-Sera and RBCs	Rare anti-sera and RBCs must be 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. <i>*Springfield IRL location only.</i>
Antibody Titer	Performed on prenatal specimens with an alloantibody identified. Titer result and score will be reported.
Autoadsorption (PeG / Untreated)	Autoadsorption technique is performed only on those 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. This adsorption method allows for the adsorption of a panreactive antibody in patients that have been recently transfused. Method of adsorption performed is dependent on antibody reactivity, patient history and tech decision. <i>*Springfield IRL and St. Louis locations only.</i>
Papain Treated Stroma Adsorption	Adsorption method allows for the adsorption of a panreactive antibody in patients that have been recently transfused. Stromal adsorptions are allogeneic adsorptions routinely used for eluate adsorptions in the Springfield reference lab. <i>*Springfield IRL location only.</i>
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 as well as resolving drug related testing interference such as Daratumumab.
Chemical Treatment of Plasma	Test procedure that utilizes a special concentration of the DTT chemical to destroy IgM antibodies while IgG antibodies remain intact. Important in determining clinical significance of a maternal antibody and assessing HDN risk. <i>*Springfield IRL and St. Louis locations only.</i>
Enzyme Treatment of RBCs	Allows for differentiation of multiple antibodies, as well as aiding in the classification of low and high frequency antibodies. Ficin and Trypsin are available.
Le Neutralization	Test method used for the identification and confirmation of rare Lewis antibodies. <i>*Springfield IRL and St. Louis locations only.</i>

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P1 Neutralization	Test method used for the identification and confirmation of rare P1 antibodies. <i>*Springfield IRL and St. Louis locations only.</i>
Plasma Neutralization	Test method used for the identification of rare Chido/Rodger antibodies. <i>*Springfield IRL and St. Louis locations only.</i>
Direct Antiglobulin Test	Each antibody ID specimen receives two DAT's. One anti-IgG DAT performed in gel and one anti-C3 DAT performed in gel or tube.
Super DAT	Test method 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 that allows for the separation of autologous cells from 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 for sickle cell patients that allows for the separation of autologous cells from 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. <i>*Springfield IRL and St. Louis locations only.</i>
IS XM	Crossmatches may be requested by the hospital / transfusing facility to ensure patient compatibility before units are delivered by MVRBC.
AHG Crossmatch	<i>All crossmatches must be repeated by the hospital / transfusing facility.</i>
Antigen Screen with Patient Plasma	Performed upon request when a patient currently has an antibody of undetermined specificity, Warm autoantibody, or HTLA antibody and has a history of incompatible crossmatches.
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 and Davenport location only.</i>
RHD Variant Assay	The RHD variant assay detects variations of the RHD antigen represented by weak and partial gene expression. The RHD variant assay is useful for prenatal patients to determine Rh Immune Globulin eligibility. It is also recommended when discrepant RHD typing results are obtained on a patient.
PakPlus: ELISA Platelet Antibody Screen	The PakPlus test detects both HPA and HLA antibodies. Additional antibody identification testing is required when an HLA antibody is detected. <i>*Springfield IRL location only.</i>
HLA Class I Antibody ID Bead Immunoassay on the Luminex	Once an HLA antibody is detected in the PakPlus, the HLA Class I Antibody ID is performed to identify the HLA antibody. The PRA is determined and reported. <i>*Springfield IRL location only.</i>

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Capture - P Platelet Crossmatch	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 MVRBC's 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 MVRBC's 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	MVRBC is able to provide HLA or HPA matched / mismatched platelet products. This service may require several days' notice to call in a compatible donor. <i>*Springfield IRL location only.</i>
Saline Washed Red Blood Cells and Platelets	Process performed to RBCs or Platelets to remove unwanted plasma and plasma proteins, metabolic waste products, micro-aggregates and anticoagulant that may cause an adverse reaction. <i>*Springfield IRL and Davenport locations 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>