

Standard Operating Procedure

SUBJECT: Blood Bank Critical and other Equipment Storage and Location			
ORIGINATION DATE:	December 2024	PREPARED BY: Lab	APPROVED BY (If Applicable):
LAST REVIEWED:	December 2024		

PROCEDURE:

(Indicates critical equipment and reagents**)**

Equipment: Validation is completed on all critical equipment before use. See Quality Plan "Equipment Policy". Equipment shall be calibrated and/or adjusted upon receipt or after major parts replacement.

1. **Blood Bank Refrigerator** (RMC 11758, Biotech #147516) – Large Helmer refrigerator in the Blood Bank Department, stores cold reagents and PRBC.
2. **Blood Bank Plasma Freezer** – (RMC 13122) – Helmer freezer for storing FP24/FFP in the Blood Bank Department.
3. **Sero-12 Centrifuge** (RMC 16933)- Located on Blood Bank counter. Optimal spin time located on the right hand side.
4. **Agglutination Mirror** (RMC 11228)- Located on Blood Bank counter.
5. **Helmer 4 Bay plasma thawer** (RMC13498)- Located on Blood Bank counter.
6. **Digital Thermometer**- Located in top drawer by blood bank refrigerator

Blood Bank Refrigerator:

Blood Products- All PRBC units are stored in the Blood Bank refrigerator at 1-6°C- Located on second shelf

The following reagents are located in the Helmer Blood Bank fridge and should be treated as potentially infectious. They are ready to use and stored at 2-8°C. Reagent reactivity diminishes with age. Any signs of turbidity or hemolysis indicate deterioration and if seen, the reagent should be discarded and not used for testing.

1. **Blood Grouping reagents-** Located on 3rd shelf
 - a. Blood Grouping Serum Anti-A
 - b. Blood Grouping Serum Anti-B
 - c. Blood Grouping Serum Anti-D
 - i. These 3 anti-seras are prepared from human sera of hyperimmunized donors.
2. **Reverse Cells-** Located on 3rd shelf
 - a. A Cells
 - b. B Cells
 - i. 0.8% and 3% solutions available, each is a suspension of human red blood cells in a low ionic strength diluent with preservatives.

3. **Screening Cells- Located on 3rd shelf
 - a. I Screening Cells
 - b. II Screening Cells
 - i. 0.8% and 3% solutions are available. Contains RBC's containing antigens necessary for detecting the most important clinically significant antibodies.
4. **Ortho simulated whole blood daily QC- 4 tubes within the package. Located on 3rd shelf
5. **Anti-Human Globulin-Located on 3rd shelf, Polyspecific (IgG, C3d): A solution of diluted antibodies directed against human globulin and complement.
6. **Coombs Control Cells or Check Cells: 2-5% solution of human red blood cells sensitized with human IgG antibody.
7. **Albumin (22%)- Located on 3rd shelf. Antibody enhancement reagent that provides an increased protein environment needed to enhance agglutination of red blood cells. This may be used to make a 6% Albumin solution= 3ml 22% Albumin + 8ml Blood Bank saline. Located on 3rd shelf
8. **MTS- 2+ Diluent: Located on 3rd Shelf
9. **MTS- 2 Diluent; Located on 3rd Shelf

Blood Bank Freezer:

The following materials are stored in the Blood Bank freezer at $<-18^{\circ}\text{C}$

1. ** Blood Products- FFP or FP24- Located on first shelf
2. Freezer packs used for shipping Blood products back to supplier, located on second shelf

Room Temperature:

The following reagents are stored at $15-25^{\circ}\text{C}$ and are ready to use.

1. **Isotonic Saline (0.85%)- Used in immunohematologic procedures as a general laboratory diluent.
2. **Gel Grouping Cards found in cabinet below centrifuge
 - a. MTS A/B/D Monoclonal and Reverse Grouping Card
 - b. MTS Anti- IgG Card for antibody screens, crossmatches and DAT Testing
3. Transfer Pipettes: Found in 3rd drawer in Blood Bank
4. 12x75 mm Test Tubes- In tube dispenser on Blood Bank Counter
5. 10x75 mm Test Tubes- Found on Blood Bank Counter.
6. BBands- Found in Cabinet above computer
7. **Freezer and Refrigerator temperature charts, Located in the cabinet above the blood bank computer.

Forms:

1. Blood Bank Log Book: Found in 4th drawer in Blood Bank
2. Transfusion forms and Blood Bank Requisition slips- Located in the Cabinet above the Blood Bank computer.
3. Transfusion Reaction Forms: Found on form imprint (Form 1070)
4. Platelet Temperature Form: Located on Google Drive in printable forms, copies in Blood Bank SOP and Policy Binder
5. Found on the Blood Bank Counter

- a. Blood Bank SOP/ Policy Binder
 - b. Corrective Action Binder
 - c. Vision QC Binder
 - d. Vision Procedures
6. Found in Cabinet above counter:
- a. QC Binder/ material monitoring Binder
 - b. Emergent sign out Binder
 - c. Critical reagent Binder

Critical Materials:

- 1. All Critical materials should be inspected upon receipt and tested before use.
- 2. Inspection includes:
 - a. Label is complete, intact, affixed and legible
 - b. Containers are in good condition
 - c. Materials show no or little turbidity, hemolysis or precipitation
 - d. Materials are not expired
- 3. Blood Products will be retyped to verify ABO/Rh
- 4. Blood Bank Saline will be visually inspected and run as a negative control
- 5. If these requirements are not met, the materials are rejected and destroyed. or placed on the quarantine shelf until the supplier is notified.