

Plasma Collection Kit Kruuse

Preparation of the 3,5 L Collection Bag

- Fill the anticoagulant through the long port using a **pink cannula**. **CAUTION:** Puncture the anticoagulant bag only once; use a single needle and do **not** puncture it twice.
- Important: The tubing should be primed with anticoagulant (therefore clamp the tubing at the upper end beforehand) before removing the cannula from the tubing.
- Before blood collection, aseptically withdraw approximately 50 ml of anticoagulant and set it aside for flushing the tubing after blood collection.

Jugular Vein Blood Collection

- Prepare the vein aseptically.
- Insert and secure a 12 G intravenous catheter, advancing it toward the head.
- Attach the tubing to the catheter.
- Remove the clamp.
- Collect approximately **3.5 L** of blood.
- Allow the collection bag to fill completely with the tubing pointing downward, then gently invert/swirl the bag once (!).
- Apply the clamp, disconnect the tubing from the catheter, strip the remaining blood from the tubing into the bag, and reapply the clamp at the lower end of the tubing.

Hanging Period (Minimum 6 Hours)

- Hang the collection bag with the tubing pointing upward on a wall or another stable surface.
- Attach a three-way stopcock with the yellow cap.
- Attach the syringe containing anticoagulant and remove the clamp.
- Flush the tubing with the remaining anticoagulant (60 ml)
- Allow to rest for 6–8 hours (Store in a clean, dry place and do not move the bag).

Transfer Plasma into 1 L Bags

- Connect both bags using the three-way stopcock.

- Position a sturdy clamp board approximately 1 cm above the interface between erythrocytes and plasma.
- Open the three-way stopcock, remove the clamp, discard the first milliliters of plasma, then adjust the stopcock so that the plasma flows into the 1 L bag.
- Continuously express the plasma into the collection bag. The clamp board must **NOT** be removed from the bag, otherwise the erythrocytes will become resuspended.
- Replace the 1 L bag when full. Close the tubing with a clamp or knot, otherwise plasma will leak from the tubing (closing it with a cannula alone is not sufficient).
- **3.5 L of blood yields approximately 2,5 L of plasma.**
- Label with collection date and identification, then freeze at **-20 °C**.

The plasma can be stored frozen at **-20 °C for several weeks** without problems.

Thawing at **38 °C** is also possible (no cracking observed).

Knots and clamps can be removed without difficulty.