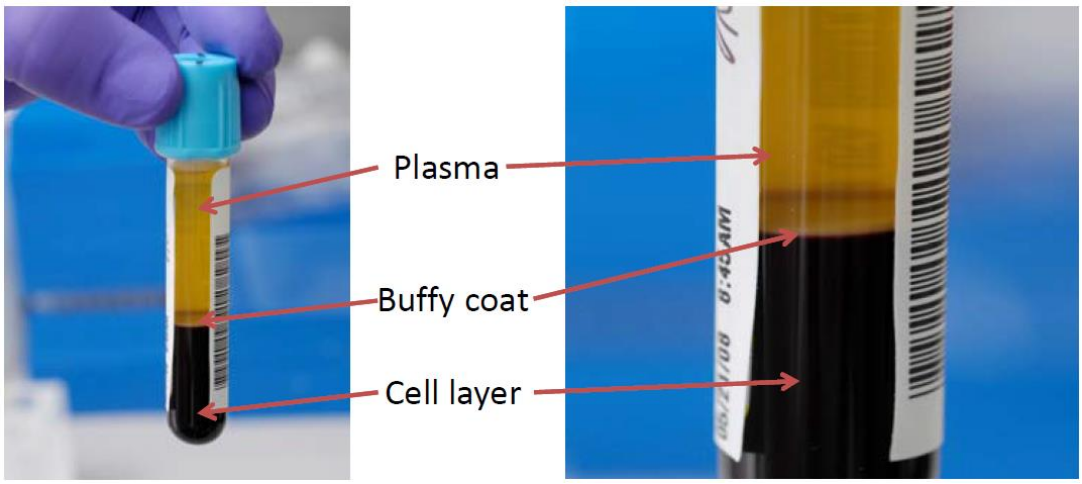
Platelet Poor Plasma (PPP) Preparation

1. **Draw blood from the patient into light blue-top (sodium citrate) evacuated tubes** containing 3.2% sodium citrate.
    a. The tubes must fill completely. A clean venipuncture is essential to avoid activation of coagulation by tissue thromboplastin.
    b. Mix gently by inverting the tube end over end 5 to 6 times. Avoid vigorous mixing or additional inversion. Observe for the presence of clots. Specimens containing fibrin clots will, in most cases, be rejected.
    c. Maintain at ambient temperature until processed. Transport at ambient temperature to the processing site or facility.
    d. Sample processing ideally should take place within 1 hour of collection time; however, it must be completed within 4 hours of collection time.
2. **The specimen must be double-centrifuged to prepare a platelet-free plasma specimen (platelet count <10,000/mcL).**
    a. Immediately centrifuge specimen (1500 x G for 10 minutes).
    b. Carefully remove plasma from cells, avoiding the platelet/buffy coat.
    c. Dispense into a plastic tube using a plastic transfer pipette. Do not pour off!
    d. Centrifuge aliquoted plasma a second time (1500 x G for 10 minutes).
    e. Remove the top portion of plasma, leaving approximately 250 mcL in the bottom to **discard**.
    f. The double-centrifuged plasma should be aliquoted (1 to 2 mL per aliquot) into clearly labeled plastic tubes. The number of tests ordered will determine the aliquots needed. Generally, a 1 mL aliquot per test is required, although test volumes may be combined up to 2 mL of plasma per aliquot. Pay particular attention to the amount of specimen required for the ordered tests. Coagulation profiles (see individual test specimen requirements) and multiple single-test orders will require multiple aliquots.
3. **Label each tube "PLASMA".**
4. **Specimens should be frozen at below -40° C**, if possible, and sent together. Specimens must arrive frozen.



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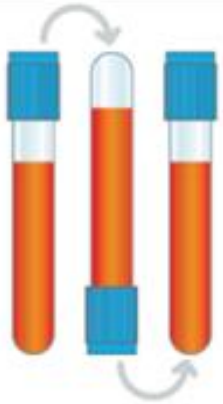
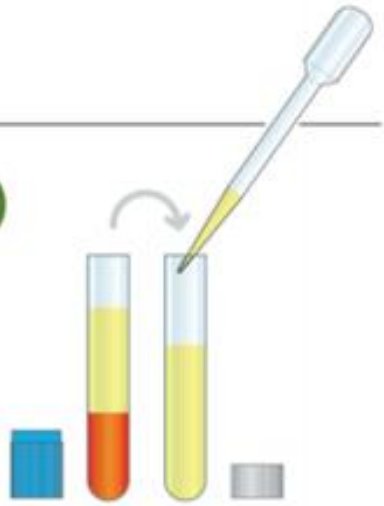


Immediately after collection, mix specimen by gentle inversion. Complete processing within 60 minutes of collection.

2

Centrifuge at 1500 x g for 15 minutes.

3

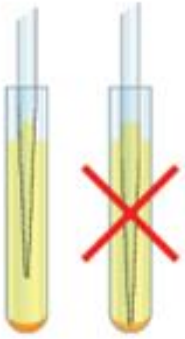


Using plastic Pasteur Pipettes, transfer supernatant plasma to a plastic tube.

4

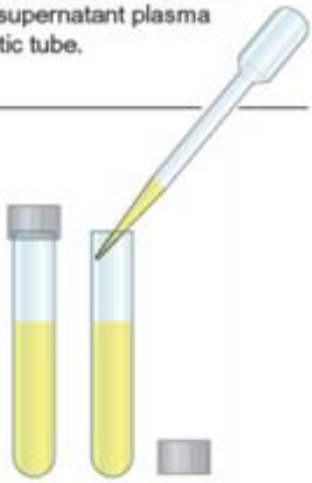
Cap and centrifuge supernatant plasma at 1500 x g for 15 minutes.

5



Remove supernatant plasma from second spin, being careful to not disturb the sediment at the bottom of the tube.

6



Transfer plasma to plastic storage tubes.

7

Label tubes with patient information and specimen type.

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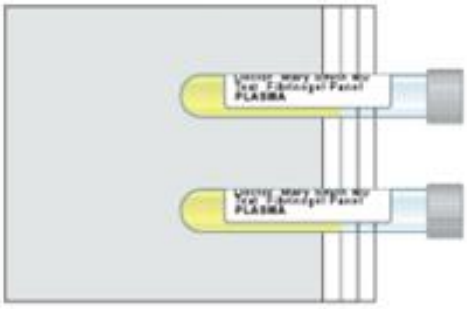

Immediately process and place specimens at the proper temperature for transport. Specimens should be FROZEN.