

FOR ANY TEST REQUIRING FROZEN PLASMA FROM A LIGHT BLUE TOP TUBE

If testing is not performed at the drawsite, then frozen platelet-poor plasma must be submitted for testing. Samples for coagulation testing have limited room temperature stability, ranging from 1 to 24 hours. Coagulation assays are also extremely sensitive to methods of sample collection and processing. Test results are a direct reflection of sample integrity.

IT IS THE CLIENT'S RESPONSIBILITY TO ADHERE STRICTLY TO PROCESSING GUIDELINES.

ANTICOAGULANT

- 3.2% sodium citrate is the anticoagulant of choice for all coagulation tests that require plasma.
- The sodium citrate tubes have light blue tops.

ORDER OF DRAW

- Collect light blue top (citrate) tubes before other tubes.
- Draw the appropriate number of properly filled light blue tubes.
- For a single test, draw one light blue top tube.
- For in-house panels or groups of tests, 4 light blue top tubes are usually sufficient.

COLLECTION

- Venipuncture is the preferred method of collection. Use of a size 21-gauge needle (size 23 minimum) will help avoid hemolysis.
- When absolutely necessary, samples may be collected from catheters maintained with saline only - NO HEPARIN. Discard the first 5-10mL of blood collected.
- Allow the tube to fill until the vacuum is exhausted and blood flow ceases.

BD Tubes

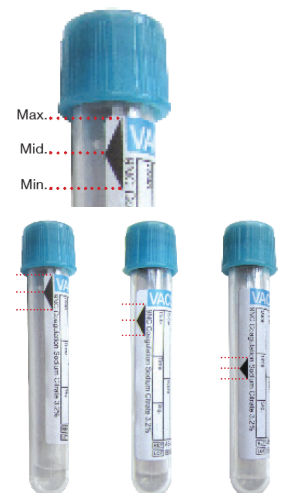
A properly filled BD tube will be filled to or above the frosted line on the tube.



Greiner Tubes

A properly filled Greiner tube should be filled to the point where the top of the blood level falls within the black triangle on the tube.

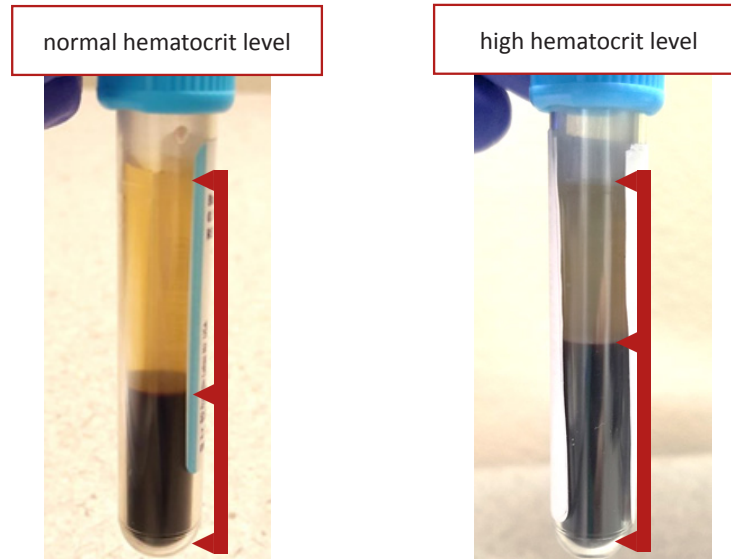
Be aware that the black triangle location may be different on different Greiner tube types.



- If good blood flow cannot be obtained, a repeat venipuncture is recommended.
- Tubes should fill between $\pm 10\%$ of the stated draw volume of the tube.
- The minimum fill indicator (the etched/frosted line near the top of the BD tube or blood level within the black triangle on the Greiner tube label) represents the minimum volume of blood required for appropriate analysis.
- When using a winged blood collection set for venipuncture, a discard tube must be drawn first. This process removes the air from the blood collection set to ensure the proper blood volume is obtained in the tube.
- Do not fill tubes from other tubes or combine two partially filled citrate tubes.
- Immediately after draw, gently invert tube at least 3 to 4 times. Do not shake.

ACCEPTABLE FILL VOLUMES

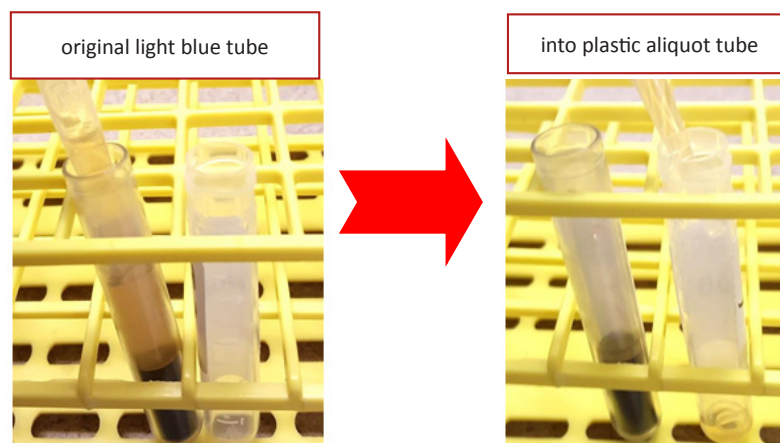
- Each tube must be properly filled until the vacuum is exhausted, as the ratio of blood to anticoagulant is critical to testing. Patients with high hematocrits (>55%) – the tube has more cells than plasma – must be collected into special hematocrit-adjusted tubes (available upon request).



PREPARATION OF PLATELET-POOR PLASMA

It is critical that the following specimen processing procedure be followed exactly.

- Best Practice** Within 1 hour of collection, centrifuge capped light blue (citrate) tube(s) at a speed and time to consistently produce platelet-poor plasma.
- If the tube has more cells than plasma, check the patient's hematocrit. If >55%, this tube must be rejected and the sample must be collected into special hematocrit-adjusted tubes (available upon request).
- Using a plastic transfer pipet, remove 80-90% of the plasma. Place this plasma in a polypropylene plastic aliquot tube with cap. **Do not combine plasma from multiple tubes.**





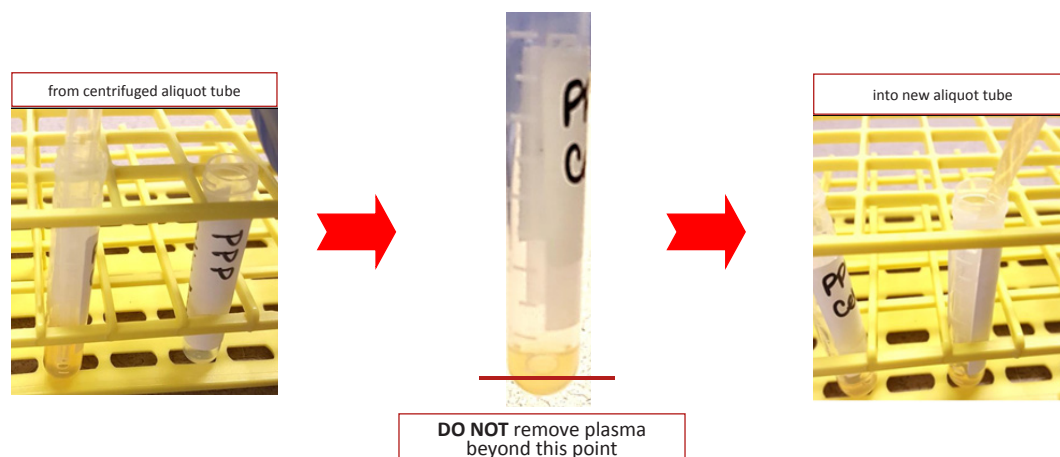
PREPARATION OF PLATELET-POOR PLASMA FOR COAGULATION TESTING, continued

4. Using a wooden applicator stick, check the cells remaining in the blue top tube(s) for a clot. If a clot is found, this tube will need to be recollected.

Note: Do not submit plasma from tubes in which a clot was detected



5. Centrifuge the plasma in the capped plastic aliquot tube(s) (Step 3 above) at the same speed and time setting used in Step 1.
6. Using a pipet, transfer the top 80%-90% of plasma from the centrifuged aliquot tube (Step 5) to a new plastic aliquot tube. Do not disturb the plasma in the bottom of the spun tube, where any residual platelets will be.
 - Use one aliquot tube per blue top tube drawn.
 - Do not combine plasma from multiple tubes.



7. Aliquots with visible red cells or hemolysis (pink plasma) are not acceptable.
8. Label tubes with patient identifier, sample type (citrate plasma), test name, and date and time of collection.
9. Freeze plasma immediately (preferably with the tubes in an upright position). The use of a frost-free freezer is discouraged as freeze-thaw cycles may lead to sample integrity issues.

Samples must remain frozen during transport. Ship samples on sufficient dry ice to ensure that specimens will not thaw in transport.

IF YOU HAVE QUESTIONS

In the Albuquerque area, please call TriCore's Special Coagulation Department at 505.938.8844.
Outside Albuquerque, call us toll-free at 800.245.3296, ext. 8844.