



## Hemostasis/Thrombosis Specimens

### Collection Procedure

1. Obtain venous blood by clean venipuncture.
  - Avoid slow flowing draws and/or traumatic venipunctures as either of these may result in an activated or clotted specimen.
  - Do not use needles smaller than 23 gauge.
  - Do not leave the tourniquet on for an extended length of time before drawing the sample.
2. Fill light-blue-top tubes as far as vacuum will allow and mix by gentle inversion.
  - Exact ratio of nine parts blood to one part anticoagulant must be maintained. Inadequate filling of the sample tube will alter this ratio and may lead to inaccurate results.
  - Patients who have hematocrit values above 55% should have the anticoagulant adjusted to maintain the 9:1 ratio. Use the following formula to determine the amount of anticoagulant to use:  $[(100 - \text{Hct}) / (595 - \text{Hct})] * \text{total volume} = \text{amount of anticoagulant required}$ .
3. Centrifuge the specimen at 17,000 x g for 15 minutes (or at a speed and time required to consistently produce platelet-poor plasma — platelet count less than 10,000/  $\mu\text{L}$ ).
4. Immediately remove only the top two-thirds of the platelet poor plasma from the specimen using a plastic transfer pipet (use of glass transfer pipets may result in activation and/or clotting of the plasma).
5. Place the plasma in a properly labeled transport tube.

If you are unsure as to the adequacy of your platelet-poor plasma, follow this procedure:

1. Spin the blue-top tube at 17,000 x g for 15 minutes.
2. With a plastic transfer pipet, pull off the top two-thirds of the plasma and place in a plastic transport tube.
3. Spin this tube again for 15 minutes at 17,000 x g.
4. Remove the top two-thirds of the plasma with a plastic pipet and place in a plastic transport tube. This will be your plasma transported for testing.  
Note: Hemolyzed specimens will be rejected.
5. Immediately freeze the plasma in a non-frost free freezer. Samples may be stored at -20°C for two weeks or preferably at -70°C. Specimens must remain frozen during storage and shipment.
6. A separate transport tube must be submitted for each assay requested.

7. All requests for coagulation assays should include a brief patient history and other pertinent clinical information (e.g., medications, blood products, etc.).

Note: Specimens containing heparin should not be used for coagulation studies. If possible, stop heparin therapy before the draw to avoid contamination. Heparin interferes with most clotting assays.

For any questions about Hemostasis/ Thrombosis sample collection or testing, please phone 812-450-2482.