



Centrifugation Instructions

Centrifuging is used to separate serum (SST tube or Red top tube) or plasma from the patient's blood cells. Tubes should be centrifuged prior to courier pickup.

Plasma:

Plasma tubes may be centrifuged immediately after drawing blood. Gently invert the tubes several times after the blood is drawn so that the anticoagulant is properly mixed throughout the specimen. Place the tube in the centrifuge, be sure the centrifuge is balanced, and centrifuge the specimen for 10 minutes at 3000-3500 rpm. Unless using an SST plasma tube transfer the plasma to a plastic transfer tube and refrigerate (Blue tops only: freeze the separated plasma).

Serum:

Serum Separator Tubes (SST) and Red top tubes must be allowed to **sit for 30 minutes** before centrifugation to allow the specimen to clot. They should then be centrifuged within 30 minutes. Failure to do so may lead to a compromised specimen. Centrifuge these specimens for a full 15 minutes at 3000-3500 rpm, and then refrigerate until transport to LabsNW. (Note: some test requirements specify that the specimen remain at room temperature. Check details for each test in the *Test List* section).

Balancing the centrifuge:

When placing a tube in the centrifuge, there must be another tube of similar size and volume in the carrier opposite the specimen tube. The centrifuge must be balanced prior to spinning. For balancing the centrifuge, if another tube with blood (or urine) is not available, use an empty tube and fill it to the needed amount with water. After the centrifuge is carefully balanced, turn it on and watch carefully to ensure it is balanced properly. If not, the centrifuge will shake or make a loud noise. If this happens, turn it off immediately and double-check the balanced tubes. Check for these additional problems:

- An extra, unseen tube may be in one of the tube carriers. Check all carriers for extra tubes. Shine a flashlight into all empty carriers to see if you can spot an extra tube.
- A cushion may be missing from one of the carriers. A good way to check for cushion balance problems is to empty the specimen tube carriers and measure the depth of the carrier with a pen or pencil. If the depths vary, there may be two cushions in one carrier, or no cushion in a carrier.
- If a cushion is lost, or needs to be replaced, notify the lab. A good immediate fix is to remove a stopper from a serum separator tube and place it in the bottom of the carrier. This approximates a cushion depth and weight, and the centrifuge is operational until the cushion can be replaced.
- A previous tube has leaked liquid into the tube holder. This can be checked by removing all tubes and tube holders. Turn the tube holder upside down and drain the extra fluid.

Important notes:

- Employ safe handling techniques when centrifuging; wear gloves, always centrifuge with the lid latched tightly, and centrifuge all tubes with their caps on to avoid creating aerosols.
- Wait until the centrifuge has completely stopped before opening the lid.
- If the specimens are not separating completely, our technical staff can help determine if your centrifuge is not producing enough RPM. Please call Client Services.