Laboratory test results are dependent on the quality of the specimen submitted. It is important that all specimens and request slips be properly labeled with the name of the patient, collection date, and the origin (source) of the specimen, when applicable.

To help ensure patient identification, every Rockford Health Medical Laboratories (RHML) request slip must have appropriately labeled tube(s).


If there is any doubt or question regarding the type of specimen that should be collected, it is imperative that RHML (815-971-LABS [5227]) be called to clarify the order and specimen requirements.

**Blood Collection**

Most laboratory tests are performed on anticoagulated whole blood, plasma, or serum. In general, specimens should be refrigerated until placed in the courier box for transport to the laboratory. Please see our individual test directory section for specific requirements.

- **Plasma**: Draw a sufficient amount of blood with indicated anticoagulant to yield necessary plasma volume. Gently mix blood collection tube by inverting 6 to 10 times immediately after draw. If required, separate plasma from cells by centrifugation within 20 to 30 minutes.
- **Serum**: Draw a sufficient amount of blood to yield necessary serum volume. Allow blood to clot at ambient temperature; and then, separate serum from clot by centrifugation within 20 to 30 minutes. Caution: avoid hemolysis.
- **Whole Blood**: Draw a sufficient amount of blood with indicated anticoagulant. Gently mix blood collection tube by inverting 6 to 10 times immediately after draw.

**Specimen Collection Tubes**

The following is a list of tubes referred to in RHML/Mayo Medical Laboratories’ specimen requirements:

- **Green-Top Tube (Lithium or Sodium Heparin)**: This tube contains sodium heparin—used for collection of heparinized plasma or whole blood for special tests.
- **Grey-Top Tube (Potassium Oxalate/Sodium Fluoride)**: This tube contains potassium oxalate as an anticoagulant and sodium fluoride as a preservative—used to preserve glucose in whole blood and for some special chemistry tests.
- **Lavender-Top Tube (EDTA)**: This tube contains EDTA as an anticoagulant—used for most hematological procedures.
- **Light Blue-Top Tube (Sodium Citrate)**: This tube contains sodium citrate as an anticoagulant—used for drawing blood for coagulation studies.
- **Red-Top Tube**: This tube is a plain VACUTAINER® containing no anticoagulant—used for collection of serum for selected chemistry tests as well as clotted blood for immunohematology.
- **Royal Blue-Top Tube**: There are 2 types of royal blue-top Monoject® tubes—1 with the anticoagulant EDTA and the other plain. These are used for collection of whole blood or serum for trace element analysis. Refer to individual metals in individual test listings to determine tube type necessary.
- **Serum Gel Tube**: This tube contains a clot activator and serum gel separator—used for various laboratory tests.
- **Special Collection Tubes**: Some tests require specific tubes for proper analysis. Please contact Mayo Medical Laboratories prior to patient draw to obtain correct tubes for metal analysis or other tests as identified in individual test listings.
- **Yellow-Top Tube (ACD)**: This tube contains ACD—used for drawing whole blood for special tests.