

Collection and Handling of Specimens

Prior to specimen collection, review the specimen requirements for each procedure. The accuracy of laboratory testing depends on careful patient preparation, collection, handling, storage, and transportation of specimens. All specimens must be labeled with two patient identifiers: Patient's name (full first and last), and either date of birth, social security number, or medical record number. Please print patient identification with the last name followed by the first name and middle initial.

Serum Specimens

- *Gently invert the tube 4 to 5 times to thoroughly mix, then leave tube upright in rack to clot.
- *Allow blood to clot at room temperature for 30 to 60 minutes, but no longer than 2 hours.
- *Centrifuge at appropriate speed for 15 minutes.
- *Remove serum and place in a separate plastic labelled tube.

Serum separator tubes (SST or Corvac brands) are available upon request from the laboratory. After centrifugation, a gel interface forms between the cells and serum. We suggest that clients using mail, air and ground service for specimen transportation place serum in a separate, plastic and labelled tube. The gel may dislodge during mailing, which can re-suspend the cells in the serum and possibly compromise the results of some laboratory procedures.

Plasma Specimens

- *Draw 1 full 5-mL or 7-mL Vacutainer tube containing the specified anticoagulant (see Vacutainer color code table). Gently invert the tube approximately 10 times to thoroughly mix.
- *Centrifuge at appropriate speed for 10 minutes.
- *Remove plasma and place in separate plastic labelled tube.

Whole Blood Specimens

- *Be sure the Vacutainer tube is filled to avoid dilution errors. Invert the tube gently 10 times to insure proper mixing.
- *If a delay in test performance is anticipated, prepare blood films from fresh blood at the time of drawing. Complete instructions for blood smear preparation are in the Useful information section of this directory.

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Frozen Specimens

Freeze specimens in a separate plastic tube for each test because glass will crack and can result in loss of sample. Please identify any frozen specimens to the courier. Call the laboratory if you need a special container to keep specimens frozen.

Semen Specimens

Semen specimens for examination should be collected after a period of three days abstinence. The specimen should be collected into a clean, screw-top jar or similar glass container and maintained as close to 37°C (body temperature) as possible. The specimen should be delivered to the

Microbiology Specimens

The correct performance of specimen collection is of utmost importance if valid and useful culture results are to be obtained. The primary goal is to obtain infected material from the involved site that contains the etiologic agent (pathogen). Care should be taken to minimize contamination of the specimen with normal skin or mucous membrane flora. Whenever possible, specimens should be collected prior to antibiotic therapy. Specimens should be transported to the lab as soon as possible to minimize loss of viability of the pathogen and overgrowth of contaminating organisms. Use transport media if appropriate. Patient information, including relevant clinical history (underlying disease, disease suspected, symptoms, etc.) and antibiotic usage are helpful in evaluation of culture results.

Vacutainer Color Coding

| Stopper Color | Anticoagulant | Specimen Type |
|--------------------------|---|----------------------|
| Red | None | Serum |
| Red mottled (SST/Corvac) | None (gel to separate serum from cells) | Serum |
| Lavender | EDTA | Plasma / whole blood |
| Green | Lithium or Sodium Heparin | Plasma / whole blood |
| Blue | Sodium citrate | Plasma / whole blood |
| Grey | Sodium fluoride and potassium oxalate | Plasma / whole blood |
| Royal blue | Sodium heparin (trace element tube) | Plasma / whole blood |
| Royal blue | None (trace element tube) | Serum |
| Yellow | ACD solution A or ACD solution B | Plasma / whole blood |
| Royal blue | EDTA (trace element tube) | Plasma / whole blood |