# Vermont Department of Health Laboratory

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# Instructions for Collecting and Shipping Specimens for the Quantiferon<sup>®</sup>-TB Gold Plus In-Tube Test (VDHL Kit # 10)

## The kit should contain:

- One Grey topped specimen tube labeled "Nil"
- One Green top specimen tube labeled "TB1 Antigen"
- One Yellow top specimen tube labeled "TB2 Antigen"
- One Purple top specimen tube labeled "Mitogen"
- One small clear Ziploc plastic bag
- One biohazard bag
- One VDHL Clinical Test Request form (Micro 220)

### **Collection Instructions**

### Important: Blood collection tubes should be at room temperature 17–25°C (62.6–77°F) at the time of blood collection.

1. Label tubes appropriately with the patient name and date of birth.

2. For each patient, collect 1 ml of blood by venipuncture directly into each of the QFT-Plus Blood Collection Tubes:

a. As 1 ml tubes draw blood relatively slowly, keep the tube on the needle for 2–3 seconds once the tube appears to have completed filling. This will ensure that the correct volume is drawn.

b. The black mark on the side of the tubes indicates the validated range of 0.8 to 1.2 ml. If the level of blood in any tube is outside of the indicator mark, a new blood sample should be obtained. Under or over-filling of the tubes outside of the 0.8 to 1.2 ml range may lead to erroneous results.

c. If a "butterfly needle" is being used to collect blood, a "purge" tube should be used to ensure that the tubing is filled with blood prior to the QFT-Plus Blood Collection Tubes being used.

- 3. Immediately after filling the tubes, shake them ten (10) times just firmly enough to make sure the entire inner surface of the tube is coated with blood. This will dissolve antigens on the tube walls. Over vigorous shaking may cause gel disruption and could lead to aberrant results.
- 4. After the specimen has been collected, there are two options available depending on the availability of an incubator at the collection site:
- **Option 1:** If an incubator is available, incubate tubes at the collection site in an upright position at 37°C ± 1°C for 16-24 hours. Store at 4°C to 27°C until ready to ship the specimens. Mark the "**yes**" checkbox under the Interferon Gamma Release Assay test option indicating the tubes have been incubated on the Micro 220 form.
- **Option 2:** If an incubator is **NOT** available at the collection site, ship the tubes directly to the VDHL. Store at 22°C ± 5°C until ready to ship the specimens. Mark the "**no**" checkbox under the Interferon Gamma Release Assay test option indicating the tubes have **NOT** been incubated on the Micro 220 form.

### **Shipment of Specimens**

- 1. Place the four specimen tubes into the small clear plastic bag. Securely seal the Ziploc bag.
- 2. Place the small clear plastic bag into the larger biohazard bag. Securely seal the Ziploc biohazard bag.
- 3. Fill out the requisition form (Micro 220) completely. Be sure to indicate on the form whether the tubes have been incubated.

- 4. Place the completed requisition form in the outside pocket of the biohazard bag.
- **5.** Shipping conditions:
  - **a. Incubated Tubes:** Ship at room temperature or cold (4-27°C). Specimens **MUST** be received at the laboratory within **3 days** after incubation.
  - **b.** Non-Incubated Tubes: Ship at room temperature only (17-27°C). Specimens **MUST** be received at the laboratory within 16 hours of collection.

**NOTE:** The VDHL business hours are from 7:45am to 4:30pm, Monday through Friday. Please plan accordingly when sending specimens.

#### Specimen Rejection

#### The Vermont Department of Health Laboratory will reject any specimens that:

- 1. Have not been incubated at 37°C and are transported on ice or refrigerated. Specimens that have not been incubated should be maintained at room temperature (22°C ± 5°C).
- **2.** Have NOT been incubated at  $37^{\circ}C \pm 1^{\circ}C$  and are received after 16 hours from the time of specimen collection.
- 3. Have been incubated at 37°C for 16-24 hours and are received more than 3 days after incubation. Specimens must be received within 3 days after incubation at 37°C.
- 4. Are received in expired blood collection tubes.
- 5. Are not collected in the tubes made specifically for the QFT test.
- 6. Blood specimens that are collected in heparin blood tubes.
- 6. Are missing any of the four QFT blood collection tubes.
- 7. Do not contain the proper amount of blood, whether under- or overfilled.

If you have any comments or questions regarding these instructions, please call one of the telephone numbers listed on page two of this form. Thank you.