

## QuantiFERON®-TB Gold uses the following collection tubes:

1. Nil Control (Grey cap with yellow ring) (use between 3,350 and 6,150 feet)
2. TB Antigen (Red cap with yellow ring) (use between 3,350 and 6,150 feet)
3. Mitogen Control (Purple cap with yellow ring) (use between 3,350 and 6,150 feet)



Antigens have been dried onto the inner wall of the blood collection tubes so it is essential that the contents of the tubes be thoroughly mixed with the blood. The tubes must be transferred to a 37°C ± 1°C incubator as soon as possible and within 16 hours of collection.

The following procedures should be followed for optimal results:

1. For each subject collect 1mL of blood by venipuncture directly into each of the QuantiFERON®-TB Gold blood collection tubes.
  - As 1mL tubes draw blood relatively slowly, keep the tube on the needle for 2-3 seconds once the tube appears to have completed filling, to ensure that the correct volume is drawn.

The black mark on the side of the tubes indicates the 1mL fill volume. QuantiFERON®-TB Gold blood collection tubes are manufactured to draw 1mL ± 10% and perform optimally within the range of 0.8 to 1.2mL. If the level of blood in any tube is not close to the indicator line, it is recommended to obtain another blood sample or to collect blood via a syringe as described below. Under or over-filling of the tubes outside of the 0.8 to 1.2mL range may lead to erroneous results.

High Altitude (HA) tubes should be used and will be provided, IF low blood draw volume does occur, blood can be collected using a syringe and 1mL transferred to each of the three tubes. For safety reasons, this is best performed by removing the syringe needle, **ensuring appropriate safety procedures**, removing the caps from the

three QFT-Gold tubes and adding 1mL of blood to each (to the black mark on the side of the tube label). Replace the tube caps securely and mix as described below.

- If a “butterfly needle” is being used to collect blood, a “purge” tube (vacutainer red or marble top) should be used to ensure that the tubing is filled with blood prior to the QuantiFERON®-TB Gold tubes being used.

2. Mix the tubes by **gently shaking up and down for 5 seconds** (or 10X) to ensure that **the entire inner surface of the tube** has been coated with the blood.

- Thorough mixing is required to ensure complete integration of the tube’s contents into the blood.
- Overly vigorous shaking may cause gel disruption and aberrant results

3. Label tubes appropriately with two specific identifiers (ie. Name, DOB, Accession number) and as follows:

- Ensure each tube (Nil, TB Antigen, Mitogen) is identifiable by its label or other means once the cap is removed.

4. Following filling, shaking and labeling, **the tubes must be transferred to a 37°C ± 1°C incubator as soon as possible and within 16 hours of collection.**

- Maintain tubes at room temperature (22°C ± 5°C) until transferred to the laboratory.
- If tubes will be incubated at your facility, they should be incubated soon after collection, for 16-24 hours. The times of specimen draw and incubation start/finish should be recorded on the test requisition.
- After incubation, collection tubes may be held between 4°C and 27°C for up to 3 days. This is the second window of opportunity for transport of specimens to the laboratory.

**For specimen collection questions and/or transport please call the El Paso County Public Health (EPCPH) Laboratory at: (719) 578-3122 or (719) 578-3124.**

EPCPH TEST code: QFTWB

CPT Code 86480