

Women & Infants Hospital
Department of Pathology and Laboratory Medicine
Providence, Rhode Island
Microbiology

Title: Quanti-FERON – TB Gold Plus (QFT-PLUS) Specimen Collection and Handling

Materials: QFT Gold Plus uses the following four collection tubes:

1. Nil (Grey cap with a white ring)
2. TB1 (Green cap with a white ring)
3. TB2 (Yellow cap with a white ring)
4. Mitogen (Purple cap with a white ring)

Note: Antigens have been dried onto the inner wall of the blood collection tubes so it is essential that the contents of the tube be thoroughly mixed with the blood.

QFT-Plus Blood Collection tubes should be at room temperature 17-25C (62.6-77F) at the time of blood collection.

Procedure:

1. Label tubes appropriately
2. Make sure each tube (Nil, TB1, TB2 and Mitogen) is identifiable by its label or other means once the cap is removed.
 - a. It is recommended to record the time and date of blood collection on the tube.
3. Collect 1 ml of blood by venipuncture into each of the QFT-Plus Blood Collection tubes.
 - a. Keep the tube on the needle for 2-3 seconds on the tube appears to have completed filling. One ml tubes draw blood relatively slowly.
 - b. The black mark on the side of the tubes indicates the validated range of 0.8 to 1.2ml. If the level of blood in any tube is outside of the indicator mark, a new blood sample should be obtained.
 - i. Under or over-filling of the tubes outside of the 0.8-1.2 range may lead to erroneous results.
 - ii. 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.
4. Shake the tubes 10 times immediately after filling. Shake the tubes firmly enough to make sure the entire inner surface of the tube is coated with blood. This will dissolve the antigens on the walls of the tube.
 - a. **Important:** Over vigorous shaking may cause gel disruption and could lead to aberrant results.
5. Following labeling and collection of the QFT-Plus Blood Collection tubes, the tubes **MUST** be left at room temperature and sent to the laboratory.