

QUANTIFERON TB GOLD PLUS 4-TUBE TEST

EFFECTIVE MARCH 18, 2019 QUANTIFERON TB GOLD PLUS 4-TUBE TEST IMPLEMENTATION

Effective March 18, 2019, Wisconsin Diagnostic Laboratories (WDL) will be replacing the 3-tube QuantiFER-ON TB Gold test with the 4-Tube QuantiFERON TB Gold Plus test. The 4-Tube Gold Plus test enables a more comprehensive assessment of cell-mediated immune response to TB infection. While the 3-tube Gold test only examined the immune response of CD4+ T cells, the 4-Tube Gold Plus test examines the immune responses of both CD4+ and CD8+ T cells. Please note the intended use of this test remains unchanged.

There are two minor differences in specimen collection:

- 1. The addition of a fourth blood collection tube.
- 2. The tubes no longer have to be drawn in a specific order.

Instructions and Distribution:

- Comprehensive specimen collection instructions are included with this memo.
- WDL will begin distribution of the new 4-Tube Collection Kits on March 4, 2019.
- 4-Tube Collection Kits are to be used beginning March 18, 2019.
- Please note the <u>3-Tube kits will not be accepted beginning March 18, 2019</u> and should be discarded.

Summary:

New Test	Mnemonic	Test Code	CPT Code
QuantiFERON TB Gold Plus 4-Tube	QTFRN TB P	4500886	86481
Old Test	Mnemonic	Test Code	CPT Code
QuantiFERON TB	QTFRN TB	4500885	86480

For technical questions or additional information, please contact:

• Ian Gunsolus, PhD, Associate Director, Clinical Chemistry and Toxicology, 414.805.6972, igunsolus@mcw.edu



QUANTIFERON TB GOLD PLUS 4-TUBE TEST



QuantiFERON-TB Gold Plus Collection Instructions

READ ALL INSTRUCTIONS & CAUTIONS BEFORE DRAWING THE PATIENT

You will notice three changes in the blood collection tubes used in the new test (4-Tube Gold Plus) compared to the old test (3-tube Gold).

- 1. The old test's red tube (TB antigen) has been replaced with two new tubes: green (TB1 antigen) and yellow (TB2 antigen). The new test uses gray (nil) and purple (mitogen) tubes, as before.
- 2. The tube labels have updated formatting.
- 3. The black fill-mark is now thicker and easier to see.

Collection instructions:

1. Before drawing the patient, confirm you are using the 4 QuantiFERON tubes:

Grey Top Tube (NIL) Green Top Tube (TB1 ANTIGEN) Yellow Top Tube (TB2 ANTIGEN) Purple Top Tube (MITOGEN)



- Each tube will draw 1 mL of blood.
- Notice the black fill-mark on the lower left side of the label.
 - This is the correct fill-level of blood when the tube is in the upright position.
 - The blood may be slightly above or below this mark & still be acceptable.
- Tubes should be at room temperature (between 63-77° F) at the time of blood filling.
- There is no order of draw for the collection. If a "butterfly needle" is used to collect blood, a "purge" tube (plain redtop tube, no additives) should be used to ensure the tubing is filled with blood prior to the QTB-Plus blood collection tubes being used.
 - Blood flow may be slow. Hold tube on needle for 2-3 seconds after flow ceases.
 - Once the tube is removed from the needle, look at the black fill-mark on the label to ensure the tube is filled correctly. Check the fill level of all tubes before shaking.
- 3. Immediately after filling, shake all 4 tubes ten (10) times just firmly enough to ensure that the inner surfaces of the tubes are coated in blood. Over-vigorous shaking may cause gel disruption and could lead to aberrant results. This step is very important.
- 4. Label all 4 tubes with patient name, medical record number or date of birth, and collection date and time.
- 5. Keep the tubes at room temperature. Do not centrifuge, refrigerate or freeze.
- 6. Transport to Wisconsin Diagnostic Laboratories.
 - <u>Tubes must be received in the laboratory within 16 hours from time of collection.</u>

CAUTIONS:

- 1. These tubes are for QuantiFERON-TB Gold Plus testing only. They cannot be used for other laboratory testing.
- 2. Ordinary blood collection tubes with the same color cap <u>cannot</u> be substituted for these special tubes.
- 3. If using a butterfly needle, draw a purge tube (plain red-top tube, no additives) first to remove air from the tubing.
- 4. Follow standard blood handling precautions.