

# FACT SHEET

## QuantiFERON®-TB Gold In-Tube Test

Test 7700

Last Updated: 7/7/14

QuantiFERON®-TB Gold In-Tube test is a whole blood assay for the detection of latent and active tuberculosis. This test offers unmatched specificity and simplicity by using modern genomic technology to provide a result unaffected by subjective interpretation, previous BCG vaccination, and cross-reactivity with most other mycobacteria. QuantiFERON®-TB Gold is highly specific and a positive test result is strongly predictive of true infection with *Mycobacterium tuberculosis*. QuantiFERON®-TB Gold is an indirect test for *Mycobacterium tuberculosis* and is intended for use with risk assessment, radiography and other medical and diagnostic evaluations

### advantages

- Eliminates false positive outcomes due to bacilli Calmette-Guerin (BCG) vaccination and most non-tuberculosis mycobacteria.
- Unlike the tuberculin skin testing, it requires only one patient visit for a blood draw. Tuberculin skin tests require 2 visits.
- Results can be available within 24 hours.
- QuantiFERON®-TB Gold is an FDA approved test for *in vitro* diagnostic use.
- The CDC has published Interferon Gamma Release Assay guidance (MMWR June , 2010) indicating the QuantiFERON test should be used in most situations where the traditional tuberculin skin test (TST) has been used.

### disadvantages

- Blood samples must be protected from temperature extremes and be processed within 16 hours after collection while white cells are still viable.

**Specimen:** Special three tube collection kit ( 1 mL whole blood per tube). Kits provided by the Public Health Laboratory.

### How does the test work?

Blood samples are mixed with antigens (substances that can produce an immune response) and controls. For QFT-G, the antigens include mixtures of synthetic peptides representing two *M. tuberculosis* proteins, ESAT-6 and CFP-10. After incubation of the blood with antigens for 16-24 hours, the amount of interferon-gamma (IFN-gamma) is measured. If the patient is infected with *M. tuberculosis*, their white blood cells will release IFN-gamma in response to contact with the TB antigens.

CPT CODE 86480



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