



**SAN MATEO COUNTY PUBLIC HEALTH LABORATORY
TEST INFORMATION**

Section: Mycobacteriology
Test Name: Quantiferon In-Tube

Test Includes: Celestis QuantiFERON TB In-Tube	
<i>Reporting</i>	
Results Available: 3 days from receipt	Contact Number: (650) 573-2500
<i>Reference</i>	
Method: EIA	
Turnaround Time: 3 days	Reference Range: Negative
Limitations: Errors in collecting or transporting blood specimens can decrease the accuracy of the test. The reproducibility of QFT-G is less when the measured amount of IFN-g is near the test's cut-off point. The sensitivity of the test in young children and immunocompromised patients has not been determined. The test cannot differentiate between latent TB and TB disease. A negative QFT-G result should not be used alone to exclude <i>M. tuberculosis</i> infection in persons with symptoms or signs suggestive of TB disease. The effects of lymphocyte count on reliability is unknown. The minimum number required for a reliable result has not been established. ESAT-6 and CFP-10 are also present in <i>M. kansasii</i> , <i>M. szulgai</i> and <i>M. mariunum</i> .	Interpretation: This EIA test detects the release of interferon-gamma (IFN-g) in fresh heparinized whole blood from sensitized persons when it is incubated with mixtures of synthetic peptides representing two proteins present in <i>M. tuberculosis</i> early secretory antigenic target –6 (ESAT-6) and culture filtrate protein –10 (CFP-10). These antigens impart greater specificity that is possible with tests using purified protein derivative. A positive test means <i>M. tuberculosis</i> infection likely. A negative result means <i>M. tuberculosis</i> unlikely but cannot be excluded, especially when illness is consistent with TB disease and the likelihood of progression to TB disease is increased. A indeterminate result means either the results can not be interpreted due to low mitogen response or high background response.
<i>Specimen Requirements</i>	
Specimen Collection: Venipuncture	Sample Type: Blood
Volume/Amount Required: 1 mls whole blood collected in three Quantiferon tubes: Test, Mitogen and Control.	Preferred Specimen: Whole blood
Collection/Preservation: Three Quantiferon tubes: Test, Mitogen and Control.	Storage Instructions: Do not freeze or refrigerate whole blood.
Causes for Rejection: Discrepancy in specimen identification; insufficient quantity of specimen; gross hemolysis, specimen too old (received >16 hours after collection), collected in wrong tube.	Sample Container: Three Quantiferon tubes: Test, Mitogen and Control.
Sample Test Kit:	Availability: Performed Tuesday and Thursday
Diagnostic Information: Quantiferon In-Tube is an aid for diagnosing both latent tuberculosis infection and tuberculosis disease. The test can be used in all circumstances in which the tuberculin skin test (TST) is used. The timing of In-Tube testing should be the same as for TST	



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for contacts to cases. In-Tube is not affected by prior BCG vaccination and is less influenced by previous infection with nontuberculous Mycobacteria. In-Tube does not trigger an anamnestic response. An indeterminate In-Tube result does not provide useful information regarding the likelihood of *M. tuberculosis* infection. The optimal follow-up of persons with indeterminate In-Tube results has not been determined.

Specimen Submission

Request Form: Standard Clinical Test Request form or through computer interface

Specimen Handling: Use Universal Precautions

Transport Temperature: Ambient temperature

Shipping Requirements: Specimens must be received in the laboratory <16 hours after collection to initiate testing.

Billing

CPT Code(s): 86480

Fees: \$40.00

Effective Date: July 1, 2008