

November 2009

REGIONAL PATHOLOGY SERVICES  
DEPARTMENT OF PATHOLOGY AND MICROBIOLOGY  
www.reglab.org

## TB Interferon Screening

Test includes: Detection of interferon- $\gamma$  (IFN- $\gamma$ ) by ELISA is used to identify in vitro responses to ESAT-6, CFP-10 and TB7.7 (p4) that are associated with Mycobacterium tuberculosis infection.

### METHODOLOGY

Enzyme-linked Immunosorbant Assay

### PERFORMED

Tuesdays, received in lab by 3 p.m. Monday.

Specimens must be received in the laboratory within 16 hours of collection otherwise call for special specimen handling instructions.

### REPORTED

Results are reported by 4 pm on Tuesday.

### SPECIMEN REQUIRED

Collect Three special 1.0 mL QuantiFERON-TB Gold IT blood collection tubes (available from Regional Pathology Services).

Collect 1.0 mL of blood by venipuncture directly into each of the 1.0 mL QuantiFERON-TB Gold IT blood collection tubes only. Three special tubes need to be collected for each patient in the following order; 1) **gray** cap tube (Nil control), 2) **red** cap tube (TB antigen), and 3) **purple** cap tube (Mitogen Control). The black indicator line on the side of the tube indicates the 1.0 mL fill volume. Mix the tubes by SHAKING VIGOROUSLY for 5 seconds (10 times) to ensure that the entire inner surface of the tubes have been coated with blood.

#### NOTE

- 1.0 mL tubes draw blood relatively slowly. Keep the tube on the needle for 2-3 seconds once the tube appears to have completed filling.
- Butterfly needle blood collection. Purge tube should be used to ensure that the tubing is filled with blood prior to use of the QuantiFERON-TB Gold IT blood collection tubes.
- Short draw tube. Redrawn shorted tube immediately, not all three tubes need to be redrawn.
- Labeling. Please do not cover the top of the TB Gold IT color coded label which is necessary for the lab to identify tube type. The patient name, date of birth and the collection date and time is required on the specimen tubes.
- DO NOT CENTRIFUGE, REFRIGERATE, PLACE ON ICE, OR FREEZE THE BLOOD SAMPLES.

### Transport

Transport immediately and store at room (ambient) temperature Specimens must be sent to the laboratory immediately so they can be processed within 16 hours of collection otherwise call Regional Pathology Services for special specimen handling instructions.

### UNACCEPTABLE CONDITIONS

Specimens > 16 hours old, no exceptions.

Centrifuged specimen, refrigerated specimen, frozen specimen.

Collect time and date not recorded on specimen.

Blood collection tubes other than the QuantiFERON-TB Gold IT blood collection tubes.

Sample volume < 1.0 mL per tube.

### REFERENCE INTERVAL

Negative