

How the T-SPOT[®].TB Test Works

The T-SPOT.TB test is the new cellular blood test that detects the immune response of T cells found in peripheral blood mononuclear cells (PBMCs) that have been sensitized to *M. tuberculosis* antigens.

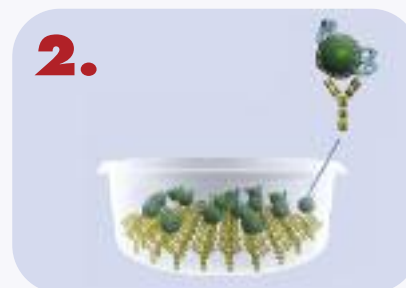
The T-SPOT.TB Test

- Removes background interferon gamma to maximize sensitivity
- Utilizes a standard number of PBMCs to correct for patient's immune status
- Uses TB specific antigens not present in BCG and most non-tuberculosis mycobacteria to prevent cross-reactivity

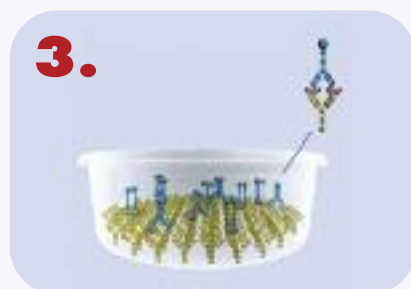
Performing the T-SPOT.TB test involves the following steps using standard lab equipment:



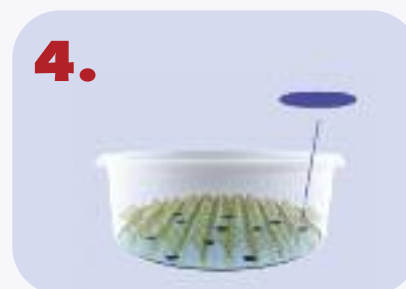
Collect the blood sample. At the lab, PBMCs are separated from whole blood, washed, counted and inoculated into 4 separate microtiter wells.



PBMCs [●] and specific TB antigens [●] are added to wells pre-coated with antibodies to IFN- γ [Y] and incubated 16 to 20 hours (37° C, CO₂).



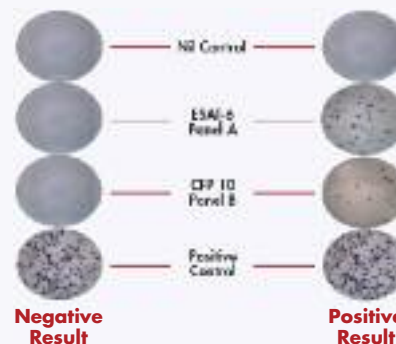
IFN- γ [●] is released from activated T cells and captured. Wash wells, add secondary conjugated antibody [●]. Incubate for one hour.



Wells are washed. A substrate is added which produces spots [●] where interferon gamma was secreted by T cells. Spots are counted.

Interpretation of Results

- Interferon gamma is captured and presented as spots from T cells sensitized to TB infection.
- Results are interpreted by subtracting the spot count in the negative (NIL) control from the spot count in Panels A and B.



The T-SPOT[®].TB Test Kit

- **Flexible, 96-well format**
 - Twelve, 8-well strips
 - Four wells used per patient; 24 patients per kit
 - Positive and Negative control for each patient test
- **Utilizes standard blood collection tubes**
- **No special lab equipment required**
- **A minimum of one patient test can be run**



Product number: TB 300