

## A Rapid Immunodiagnostic Test for Active Tuberculosis

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### Abstract

Tuberculosis (TB) is a globally prevalent disease that is caused by the aerobic, gram-positive agent *Mycobacterium tuberculosis*. Despite the accessibility of broad-spectrum antibiotics which are very effective against *M. tuberculosis*, the social and financial burden of the patients with the disease continues to be huge, especially in the developing regions such as India and sub-Saharan Africa. This is mainly owing to limited laboratory infrastructure, treatment with the least sensitive diagnostics, and non-adherence to the standard therapeutic regimens. In less equipped countries like India, where most TB cases occur, diagnosis and management of such infections become difficult owing to unavailability of rapid, accurate, and cost-effective detection systems. The available tests are either time consuming, cumbersome, or very costly. Here, we introduced new antigen detection from patient blood samples using monoclonal antibodies generated against three novel recombinant antigens.

### Biography:

Dr. Anil Gupta has completed his doctorate at the age of 32 years from ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS), NEW DELHI, INDIA (Apex medical institute of India). He has published many research articles in various international journals i.e. Nature Publishing Group (NPG), Parasite and Vector, Journal of Infection, ASM group etc. Additionally, He has published four book chapters and deposited more than 40 Genes to GenBank, NCBI, USA. His research interest is to develop an effective, cost effective, rapid test for the diagnosis of infectious diseases.

### Recent Publications:

1. Development of rapid immuno-diagnostic test for the early detection of tuberculosis, Int J Mycobacteriol, 2016 Dec;5 Suppl 1:S114-S115.
2. DEVELOPMENT OF RAPID IMMUNO-DIAGNOSTIC TEST FOR THE EARLY DETECTION OF TUBERCULOSIS, International Journal of Mycobacteriology, 2016.
3. Development of rapid immuno-diagnostic test for the early detection of tuberculosis, 2017.