



Immuno Diagnostics Pvt. Ltd.

Leading Immuno Assays Laboratory of Northern India

NABL ACCREDITED & ISO 9001:2015 CERTIFIED LABORATORY



Reference No.	: - 1912220503	Age/Gender	: 34 Yrs/Female
Pt's Name	: Mrs. SAVITA		AMB-KOS
Referred By	: NA		
Sample Collection Date/Time	: 13-Dec-2019	Date	:13-Dec-2019
Sample Receiving Date/Time	: 13-Dec-2019 05:17AM	Approval Date	:14-Dec-2019 05:45PM
Sample From	: KOS DIAG LAB	Report Print Time	:22-Dec-2019 12:43AM

Molecular Biology

Test Description	Observed Value	Biological Reference Interval
	TB Multidrug-resistant*	
Type of Specimen	Sputum	
MTB*	Undetected	
Rifampicin (RMP)*	Not applicable	
Isoniazid (INH)*	Not applicable	

Tuberculosis (TB) is an infectious disease caused by *M. tuberculosis* (MTB) complex mainly affecting lungs but can also occur in other tissues in the body. The symptoms of TB include fatigue, weakness, loss of appetite accompanied by persistent cough, phlegm and so on. MTB grows very slowly compared with other bacteria. It divides once per every 15-20 min. The method of bacterium cultivation is standard method to diagnose the activity of tuberculosis, but it requires specialized skill and time-consuming. On other hand, Real-time PCR Kit can detect MTB rapidly and accurately.

Multidrug-resistant TB (MDR TB) is caused when the causative organism is resistant to at least isoniazid (INH) and rifampicin (RMP), the two most potent TB drugs. These drugs are used to treat all persons with TB disease. Spontaneous mutations in the *M. tuberculosis* genome can give rise to proteins that make the bacterium drug resistant, depending on the drug action. Almost 2~3% of new TB patients have MDR-TB. For the effective treatment of TB and MDR-TB, early detection is the top priority. MDR-TB usually can be cured with long treatments of second-line drugs.

Interpretation :

Sensitivity : 20 copies/ml

A "DETECTED" result will be reported with its sensitivity to isoniazid (INH) and rifampicin (RMP).

A "UNDETECTED" result indicates that either absence of MTB DNA in patient's specimen or MTB DNA level is below the lower limit of detection of this assay.

A "Inconclusive Result" indicates that inhibitory substances may be present in the specimen and collection and testing of a new specimen is recommended.

methodology details :

* MDR/MTB DNA is extracted from various body fluids/parts infected with MTB by automatic extraction machine based on magnetic bead technology.

* Purified DNA is then Amplified and quantified using real time PCR Technology.

* Extraction and Amplification controls (IC) are incorporated in each run to ensure more accurate and precise detection of DNA.

Laboratory is NABL Accredited

*** End Of Report ***



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All results should be co-related clinically; if results are alarming or unexpected, contact the laboratory immediately. Not valid for Medico-Legal. Result pertain to the specimen submitted. The Tests with an * are not accredited by NABL.