

## **Novel Primers for a PCR-RFLP assay for identification of species-specific pathogenic Mycobacteria**

### **Salient Features of the Technology:-**

- This system accurately identifies pathogenic mycobacteria by gene amplification analysis.
- The assay has been validated on reference strains as well as on Indian clinical and environmental isolates from different places of country deposited in the National Repository for Mycobacteria at our Institute.
- It is used to differentiate pathogenic mycobacteria from non-pathogenic strains.
- It is used to differentiate pathogenic mycobacterial isolates at species level also.
- This assay allows better and easier differentiation on gels since the fragments generated from amplicons by this assay are bigger, which can be easily separated and analysed.
- Both slow growing and rapid growing mycobacteria could be well differentiated by using this technology.
- Results indicated that this system is a simple, rapid and reproducible method to identify clinically relevant disease causing mycobacteria.
- It is cost- effective and rapid method and found to be robust.
- The technology has been developed at laboratory scale.
- It can differentiate *M. tuberculosis* from *M. avium*, *M. intracellulare*, *M. fortuitum*, *M. chelonae* complex, *M. terrae*, *M. vaccae*, *M. kansasii*, *M. flavescens*, *M. mageritense*.
- An Indian patent has been granted on this technology.
- This technology has been developed by NJIL&OMD, Agra (an ICMR Institute).