BACKGROUND

*Mycobacterium tuberculosis* is a slow-growing obligate aerobic bacillus that causes most cases of tuberculosis (TB). It is a small, rod-like microbe that can withstand weak disinfectants and survive in a dry state for weeks but can only grow within a host organism. *M. tuberculosis* has a thick waxy cell wall that is responsible for the typical caseous granuloma formation in tuberculosis. TB infection begins when the mycobacteria reach the pulmonary alveoli, where they invade and replicate within alveolar macrophages. Bacteria are picked up by dendritic cells, which transport them to local lymph nodes. The bacteria may be further spread through the bloodstream to the more distant tissues and organs where secondary TB lesions can develop in lung apaxes, peripheral lymph nodes, kidneys, brain and bone. The 16 kDa antigen of *Mycobacterium tuberculosis* (MT 16 kDa antigen) provokes specific immune responses in an infected host, making it a target for peptide-based diagnostic reagents and subunit vaccines.

REFERENCES


SOURCE

MT 16 kDa antigen (HTM63) is a mouse monoclonal antibody raised against the 16 kDa antigen of *Mycobacterium tuberculosis* origin.