BACKGROUND
Antigen 85 complex (Ag85) is a major secretory product of actively growing Mycobacterium tuberculosis that induces strong cellular and humoral immune responses in infected mammals. The Ag85 proteins (85A, 85B and 85C) function to maintain the integrity of the highly hydrophobic cell wall by catalyzing the transfer of mycolic acids to the wall arabinogalactan and through the synthesis of trehalose dimycolate (cord factor). Ag85 also allows for a rapid invasion of the microbe into host alveolar macrophages through direct interactions between the host immune system and the invading bacillus. Intranasal vaccination of this protein induces a significantly high level of interferon-γ, interleukin-12, interleukin-4 and imparted protection in cattle. Circulating levels of Ag85 as complexes with plasma fibronectin and IgG are elevated in patients with active tuberculosis and can be a useful tool for diagnosis.

REFERENCES

SOURCE
Ag85 (HYT 27) is a mouse monoclonal antibody raised against a bacterial press extract from Mycobacterium tuberculosis strain H37Rv.

PRODUCT
Each vial contains 100 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
Ag85 (HYT 27) is recommended for detection of Mycobacterium mycolyl transferase and Mycobacterium tuberculosis Ag85C by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of Ag85: 30-32 kDa.

RECOMMENDED SECONDARY REAGENTS
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

PROTOCOLS
See our web site at www.scbt.com or our catalog for detailed protocols and support products.