

BTB Ab ELISA 2.0

Mycobacterium bovis antibody

Bovine tuberculosis is a chronic infectious disease caused by *Mycobacterium bovis*. Bovine tuberculosis infection is usually diagnosed in the live animal on the basis of delayed hypersensitivity reactions. Subclinical infection is common and clinical signs are non-specific in many cases. A sensitive and accurate diagnostic tool is required because purified protein derivative (PPD) tests have been known to have 65.6% sensitivity (Wood et al., Vet. Microbiol, 40:125-135, 1994) and other mycobacterium infection (eg; *M. avium*) should be distinguished with this method. The MPB 70 protein has been revealed to be a highly species specific protein secreted by *Mycobacterium bovis*. BIONOTE BTB Ab ELISA 2.0 kit has been developed using MPB70 protein in an Enzyme Linked Immunosorbent Assay method. The serological diagnostic test is suitable for massive screening of bovine tuberculosis to detect mid to late (anergy) state cattle.



Indications

- Search out BTB carrier
- Screening for test and slaughter government policy
- First step for massive screening instead of PPD in short-handed situation
- Combine with PPD or IFN- γ assay in eradication system

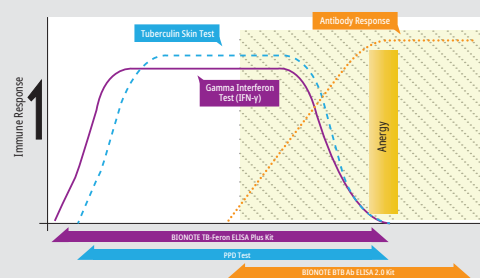
Special Features

- No cross reaction against other mycobacterium species (*M. avium*)
- Quantitative detection of *M. bovis* antibody
- The world's first reliable BTB Ab ELISA for serological diagnosis
- Reading time: 75 minutes
- Specimen: Serum
- Sensitivity: 88.1% vs. PPD test
- Specificity: 99.2% vs. PPD test

Quick Procedure

1. Prepare BTB antigen coated test plate
2. Add 50 μ l of controls and sample to wells
3. Add 50 μ l of *M. bovis* antigen-HRP to each well
4. Incubate plate for 60 minutes at 37°C
5. Wash plate 6 times
6. Add 100 μ l of mixed substrate solution (Ready to use) to each well and incubate for 15 minutes at room temperature
7. Add 100 μ l of stopping solution to each well
8. Measure the optical density (OD) at 450nm with reference wavelength at 620nm
9. $S/P \text{ value} = [(OD_{\text{sample}} - \text{mean } OD_{\text{NC}}) / (\text{mean } OD_{\text{PC}} - \text{mean } OD_{\text{NC}})]$

Immune development of bovine tuberculosis



BIONOTE BTB Ab ELISA 2.0 detects mid to late (anergy) stage of TB affected cattle by antibody titer check against TB (Laboratory method for antibody check)
Generally, *M. bovis* Ab is detectable 90 to 100 days after infection

Ordering Information

Cat. No.	Description	Type	Packing size
EB4304PO	BTB Ab ELISA 2.0	Microplate	480 Wells/Kit