



Bacillus anthracis spore antigen (7826): sc-69941

BACKGROUND

The genus *Bacillus* consists of aerobic, Gram-positive, spore-forming, rod-shaped bacterium. *Bacillus anthracis* causes anthrax, an acute infectious disease of cattle, sheep, goats, camels, antelopes and other herbivores that is highly lethal in some forms. Infection can occur in humans when exposed to infected animals or tissue from infected animals via three routes: cutaneous, inhalation and intestinal. *Bacillus anthracis* spores persist (as spores) in the soil for many years as they are resistant to heat, cold, radiation, desiccation and disinfectants. *In vivo*, *Bacillus anthracis* produces a polypeptide (polyglutamic acid) capsule that protects it from phagocytosis. The virulence factors of *Bacillus anthracis* are its capsule and three-component toxin, both encoded on plasmids.

REFERENCES

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STORAGE

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

PROTOCOLS

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

SOURCE

Bacillus anthracis spore antigen (7826) is a mouse monoclonal antibody raised against spore antigen of *Bacillus anthracis* origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Bacillus anthracis spore antigen (7826) is recommended for detection of a spore antigen specific to *Bacillus anthracis* by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of *Bacillus anthracis* spore antigen: 92 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.

RESEARCH USE

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