**BACKGROUND**

*Bordetella pertussis* is a Gram-negative, non-motile cocccobacilli of the genus *Bordetella*, and it is the causative agent of whooping cough, also called *pertussis* acute, a highly communicable respiratory disease characterized in its typical form by paroxysms of coughing followed by a long-drawn inspiration. *Bordetella pertussis* are aerobic, encapsulated microbes that favor the lining of the human respiratory tract. In addition to the attachment to and growth on ciliated cells, *Bordetella pertussis* produces several exotoxins that contribute to its symptoms. *Bordetella pertussis* causes the covalent addition of ADP-ribose to the GTP binding G protein, thereby preventing the deactivation of adenylate cyclase. This results in the accumulation of large amounts of cAMP which causes increased mucus secretion and interferes with various cellular functions. Pertussis toxin, a protein composed of five different subunits (S1, S2, S3, S4, and S5), is the major virulence factor of *Bordetella pertussis*.

**REFERENCES**


**SOURCE**

*Bordetella pertussis* toxin subunit S1 (63.1G9) is a mouse monoclonal antibody raised against *Bordetella pertussis* toxin.

**PRODUCT**

Each vial contains 50 µg IgG1 in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

*Bordetella pertussis* toxin subunit S1 (63.1G9) is recommended for detection of the intact *Bordetella pertussis* toxin and the S1 subunit of *Bordetella pertussis* toxin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of *Bordetella pertussis* toxin subunit S1: 105/27 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.

**SELECT PRODUCT CITATIONS**


**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.