

Bordetella pertussis toxin (20.6): sc-57640

BACKGROUND

Bordetella pertussis is a Gram-negative, non-motile coccobacilli 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_i 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

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SOURCE

Bordetella pertussis toxin (20.6) is a mouse monoclonal antibody raised against *Bordetella pertussis* toxin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Bordetella pertussis toxin (20.6) is recommended for detection of *Bordetella pertussis* toxin S1, S3 and S4 subunits of *Bordetella pertussis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); may cross-react with the toxoid and *Bordetella pertussis* toxin S2 and S5 subunits.

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 for detailed protocols and support products.