



Bordetella pertussis toxin subunit S3 (21.3D11): sc-57641

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. The microbe inhibits many leukocyte functions, including chemotaxis and phagocytosis, and it impairs NK cell killing. *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.

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SOURCE

Bordetella pertussis toxin subunit S3 (21.3D11) 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 subunit S3 (21.3D11) is recommended for detection of the intact *Bordetella pertussis* toxin and the S3 subunit of *Bordetella pertussis* toxin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); may cross-react with the toxoid.

Molecular Weight of *Bordetella pertussis* toxin subunit S3: 105/22 kDa.

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.