

Anti-Bordetella pertussis cells [scFv 5] Bulk Size Ab03578-23.0-BT

This full-length, chimeric rabbit antibody was made using the variable domain sequences of the original Mouse scFv format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

Clone Number: scFv 5

Alternative Name(s) of Target: filamentous hemagglutinin; FHA; pertactin; PRN; pertactin autotransporter; P.93; Pertactin; Filamentous hemagglutinin transporter protein FhaC; TpsB transporter; fhaC

UniProt Accession Number of Target Protein: P14283; P35077

Published Application(s): functional assay, ELISA

Published Species Reactivity: Bordetella pertussis

Immunogen: This antibody was generated by immunizing a BALB/c mouse with 0.1 ml of the commercial pertussis vaccine Quadracel. From this DNA a phage display library was created and panned against B. pertussis whole cells so find this clone.

Specificity: This antibody is specific for pertactin and filamentous hemagglutinin of Bordetella pertussis. Filamentous hemagglutinin is a member of a two partner secretion pathway (TPS) in which it mediates the secretion of filamentous hemagglutinin FHA (fhaB). Pertactin may have a role in bacterial adhesion, and thus play a role in virulence.

Application Notes: The scFv version of this antibody was used for an ELISA on filamentous hemagglutinin (FHA), pertactin (PRN) and B. pertussis cells. The antibody was positive very every antigen tested. The scFv version of this antibody was tested for its ability to inhibit B. pertussis binding to HEp-2 cells, normally only 35% of cells do not bind to HEp-2 cells but this antibody increases that rate to 75%-100%. Furthermore, the ability of the scFv version of this antibody to prevent B. pertussis infection in mice. The viral load present in mice after 48h was a lot lower than in normal circumstances (Hussein et al, 2007; pmid:17724067).

Antibody First Published in: Hussein et al. Construction and Characterization of Single-Chain Variable Fragment Antibodies Directed against the Bordetella pertussis Surface Adhesins Filamentous Hemagglutinin and Pertactin. Infect Immun. 2007 Nov; 75(11): 5476-5482. [PMID:17724067](#)

Note on publication: A single-chain variable fragment (scFv) antibody library against Bordetella pertussis was constructed using M13 phage display.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.