

## Anti-BpaB autotransporter [BpaB#4] Bulk Size Ab01470-21.0-BT

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This chimeric mouse antibody was made using the variable domain sequences of the original format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgM, Kappa

**Clone Number:** BpaB#4

**Alternative Name(s) of Target:** Burkholderia mallei BpaB autotransporter; BpaB-4; BpaB 4; BpaB-MAb#4; BpaB MAb#4; BpaB autotransporter of B. mallei

**UniProt Accession Number of Target Protein:**

**Published Application(s):** WB, ELISA, FC, IF

**Published Species Reactivity:** Burkholderia mallei

**Immunogen:** This antibody was raised by immunising Balb/c mice with purified his-tagged BpaB .

**Specificity:** This antibody is specific for Burkholderia mallei autotransporter BpaB. Autotransporter proteins form one of the largest class of virulence factors in Gram-negative organisms and perform important functions in pathogenesis including flocculation, formation of biofilms , complement resistance, host cell adhesion and entry, intracellular motility and replication, cytotoxicity, and lipolytic activity.

**Application Notes:** Given the function of autotransporters, such as BpaB in pathogenesis and their overall structure, they are excellent targets for developing medical countermeasures (MCM) against pathogenic organisms. A significant portion of AT (passenger domain) is readily accessible for recognition by the immune system as it is exposed on the bacterial surface. Consequently, BpaB#4 antibody is recommended as a potential research target in treatment and biosafety measures associated with B. mallei. Efficient and specific binding of this antibody to BpaB was confirmed via Western blot; BpaB#4 (BpaB-MAb#4) identified this autotransporter in the material from whole cell lysates (WCL), total membrane proteins (TMP) and sarkosyl-insoluble fraction containing OM proteins (OMP) coming from recombinant E.coli with B. mallei BpaB (Zimmerman et al., 2015). BpaB was shown to be a promising target for the B. mallei therapies due to its involvement in adherence to host cells, biofilm formation and pathogenicity in a mouse model of glanders (Zimmerman et al., 2015). BpaB#4 antibody was further utilised in the identification of B. mallei via immunostaining in various tissues experimentally infected with the bacterium, expanding the antibody's

potential use in therapeutics and diagnostics (Zimmerman et al., 2018).

**Antibody First Published in:** Zimmerman et al. The Autotransporter BpaB Contributes to the Virulence of *Burkholderia mallei* in an Aerosol Model of Infection. PLoS One. 2015 May 20;10(5):e0126437. doi: 10.1371/journal.pone.0126437. eCollection 2015. [PMID:25993100](#)

**Note on publication:** This article describes the generation and characterisation of BpaB#4 antibody.

## Product Form

**Size:** 500 µg Purified antibody in bulk size.

**Purification:** Affinity Purified using a recombinant lectin column

**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.