

# for research use only

## Certificate of Analysis

**Mouse anti-**

**Bordetella pertussis**

Catalog No	Lot No	Control No	Revision No	Revised By	Approved By	Storage
AAA14652	L25011455	C25011455	011425			4°C Do not freeze
Type	Grade	Isotype	Clone No	Concentration	Accession No	Swiss/Uni Prot N
Mab	Affinity Purified	IgG3	5E222	0.1mg/ml		

*Bordetella pertussis* is an aerobic, gram negative coccobacilli. It causes whooping cough (pertussis), an acute respiratory infection marked by severe, spasmodic coughing episodes during the paroxysmal phase. Leukocytosis with lymphocytosis is also common during this phase of the illness. Dangerous complications are bronchopneumonia and acute encephalopathy. It produces a number of virulence factors, including pertussis toxin, adenylate cyclase toxin, filamentous hemagglutinin, and hemolysin. Agglutinogens and other outer membrane proteins are important antigens. Pertussis toxin (islet activating protein) is the major protein toxin produced by virulent strains of *Bordetella pertussis*. As revealed by polyacrylamide gel electrophoresis, the purified protein consists of five dissimilar subunits: S1 (MW 28kD), S2 (MW 23kD), S3 (MW 22kD), S4 (MW 11.7kD) and S5 (MW 9.3kD), in a molar ratio of 1:1:1:2:1. The A protomer, S1 is responsible for the enzymatic activity of the toxin. Together, S2, S3, S4 and S5 comprise the B oligomer, responsible for binding the toxin to the cell surface.

### Applications:

Suitable for use in Immunofluorescence, ELISA and Western Blot. Other applications not tested.

### Recommended Dilutions:

Immunofluorescence: 1:10-1:50

ELISA: 1:20-1:200

Optimal dilutions to be determined by the researcher.

### Storage and Stability:

May be stored at 4°C. For long-term storage, aliquot and store at 4°C. Do not freeze. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial prior to removing the cap. Further dilutions can be made in assay buffer.

### Purity:

Purified by Protein A chromatography from ascites(>90%).

### Form:

Supplied as a liquid in PBS, pH 7.2, 0.09% sodium azide. No stabilizing proteins have been added.

### Immunogen:

*Bordetella pertussis*.

### Specificity:

Recognizes LOS-A of *Bordetella pertussis* and *B. bronchiseptica*. Antibody is bactericidal for *Bordetella pertussis* only.

### Important Note for small quantities:

**Liquids:** Apparent volume may be reduced due to evaporation. Add buffer to nominal volume and dilute per instructions. During shipment, small volume products may have adhered to the interior surface of the vial. To recover the maximum amount of product, centrifuge the vial lightly for 1-3 minutes and use a fine tipped pipette for removal. To recover the maximum amount of total product, wash the vial with your assay buffer/diluent. Small volumes of product (≤25ul) should be diluted for complete product recovery.

**Powders:** During shipment, small volume products may have adhered to the interior surface of the vial. To recover the maximum amount of product, centrifuge the vial lightly. To recover the maximum amount of total product, wash the vial with your assay buffer/diluent. Small volumes ~25-50ul should be diluted for complete product recovery.

**Warning:** Antibodies and antigens that contain 0.01% sodium azide: NIOSH cites a potential explosion hazard due to reaction with copper, lead, brass, or solder in metal drainage pipes. Sodium azide forms hydrazoic acid in acidic conditions. Discard in a large volume of running water. Standard Laboratory Practices should be followed. The chemical, physical and toxicological properties of this material have not been thoroughly investigated. Avoid skin and eye contact, inhalation and ingestion. See European Directive 67/548/EEC (Xn Harmful).

**Disclaimer:** Intended for research use only, not for use in human, therapeutic or diagnostic applications. Due to the highly specific nature of antibodies and antigens we cannot predict how this reagent will react in your system. Appropriate use of controls is recommended.