

***Clostridium botulinum* Toxin D Monoclonal Antibody**

ORDERING INFORMATION

Catalog No.	Clone No.	MAb Subtype	Size
18915	5131	IgG1	25ug

Format: Purified antibody in PBS, pH 7.2, 0.1% sodium azide.

BACKGROUND

Clostridium botulinum, an anaerobic, gram-positive, spore-forming rod commonly found on plants, in soil, water, and the intestinal tracts of animals, produces eight antigenically distinguishable exotoxins (A, B, C₁, C₂, D, E, F and G). Type A is the most potent toxin, followed by types B and F. All botulinum neurotoxins are produced as single polypeptide chains of ~150kDa comprised of a heavy (H) chain and a light (L) chain of roughly 100 and 50kDa, respectively, linked by a disulfide bond. The heavy (H) chain of the toxin binds selectively and irreversibly to high affinity receptors at the presynaptic surface of cholinergic neurones, and the toxin-receptor complex is taken up into the cell by endocytosis where the disulfide bond between the two chains is cleaved. The light (L) chain interacts with different proteins in the nerve terminals to prevent fusion of acetylcholine vesicles with the cell membrane.

SPECIFICATION SUMMARY

Antigen: Toxin D purified from culture filtrate of *C. botulinum*.

Host Species: Mouse

Accession no.: P19321

Specificity: This antibody recognizes *C. botulinum* Toxin D.

APPLICATIONS

ELISA: use a dilution of 1:20-1:200.

Immunocytochemistry/Immunohistochemistry: use a dilution of 1:10-1:50.

Immunofluorescence: use a dilution of 1:10-1:50.

Immunoblotting: use a dilution of 1:100-1:1,000. A band of ~150,000 is detected.

Endusers should determine optimal dilutions for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable at 4°C for short-term storage and for at least one (1) year at -20° to -70°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not intended for use in therapeutic or diagnostic procedures.