



## BoNT/D (KB21): sc-51778

### BACKGROUND

Botulism is a rare but serious paralytic illness caused by a nerve toxin, which is produced by the anaerobic bacillus *Clostridium botulinum*. This neuromuscular disorder occurs through a complex series of molecular events, ultimately ending with the arrest of acetylcholine (Ach) release and flaccid paralysis. *Clostridium botulinum* serotype D, also referred to as BoNT/D, strains normally produce two types of stable toxin complexes. The M toxin is composed of neurotoxin and nontoxic-nonhemagglutinin, whereas the L toxin is composed of the M toxin and hemagglutinin subcomponents. BoNT/D cleaves VAMP-2, part of the SNARE complex required for synaptic vesicle fusion. BoNT/D requires a hydrophobic interaction with the V1 motif of VAMP-2 during the cleavage.

### REFERENCES

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### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### SOURCE

BoNT/D (KB21) is a mouse monoclonal antibody raised against BoNT/D of *Clostridium botulinum* origin.

### PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

BoNT/D (KB21) is recommended for detection of BoNT/D of *Clostridium botulinum* origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of BoNT/D: 160 kDa.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.