



BoNT/B (KBB36): sc-51777

BACKGROUND

Botulism is a rare but serious paralytic illness caused by a nerve toxin, which is produced by the bacterium *Clostridium botulinum*. This neuromuscular disorder occurs through an exquisite series of molecular events, ultimately ending with the arrest of acetylcholine release, resulting in flaccid paralysis. BoNT/B (Botulinum neurotoxin type B), also known as Bontoxilysin B or botB, is a highly toxic 1,291 amino acid secreted protein that exists as a disulfide-linked heterodimer of a heavy chain (H) and a light chain (L). Using zinc as a cofactor, BoNT/B functions as an endopeptidase that cleaves various neuronal proteins, such as VAMP-2, thereby preventing neurotransmitter release. BoNT/B binds to neuronal synapses and is internalized and transported to the spinal cord, where it inserts itself between presynaptic and postsynaptic neurons, inhibiting neurotransmitter release and causing paralysis.

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SOURCE

BoNT/B (KBB36) is a mouse monoclonal antibody raised against BoNT/B of *Clostridium botulinum* origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

BoNT/B (KBB36) is recommended for detection of BoNT/B of *Clostridium botulinum* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of BoNT/B: 151 kDa.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.