



BoNT/E (11D4): sc-80470

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. Botulinum neurotoxin type E, also referred to as BoNT/E, cleaves synaptosomal-associated protein (SNAP-25) at the C-terminal domain releasing a 26 Mer peptide. This peptide product may act as an excitation-secretion uncoupling peptide (ESUP) to inhibit vesicle fusion which causes a long (at least three weeks) halt of ACh release after the cleavage of SNAP-25. BoNT/E also inhibits glutamate release and blocks the spike activity of pyramidal neurons. BoNT/E treatment reduces both focal and generalized kainic acid-induced seizures and also prevents the neuronal loss and long-term cognitive deficits that are associated with these seizures.

REFERENCES

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SOURCE

BoNT/E (11D4) is a mouse monoclonal antibody raised against BoNT/E 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/E (11D4) is recommended for detection of BoNT/E of *Clostridium botulinum* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with BoNT/A or BoNT/F.

Molecular Weight of BoNT/E: 156 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.