SANTA CRUZ BIOTECHNOLOGY, INC.

BoNT/A (KBA211): sc-51774

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

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 and hence, flaccid paralysis. Botulinum neurotoxin type A, also known as BoNT/A, Bontoxilysin A and Botox, is one of the most toxic substances known to humans. BoNT/A is a Zn^{2+} endopeptidase which selectively cleaves SNAP 25 (synaptosomal-associated protein), a critical component of the exocytotic machinery. Based on its nucleotide sequence, BoNT/A is a protein that exists as a dimer in aqueous solution. It is also an effective therapeutic drug against involuntary muscle disorders and for pain management. BoNT-A develops its muscle-relaxing effect by the inhibition of acetylcholine (ACh) release.

REFERENCES

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SOURCE

BoNT/A (KBA211) is a mouse monoclonal antibody raised against full length BoNT/A of *Clostridium botulinum* origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

BoNT/A (KBA211) is recommended for detection of BoNT/A of *Clostridium botulinum* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of BoNT/A: 162 kDa.

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.