Monoclonal Anti-Botulinum Neurotoxin Subtype A1, Clone A10B3.5A (produced in vitro)

Catalog No. NR-20809
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For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Antibody Class: IgG2b
Mouse monoclonal antibody prepared against the subtype A1 neurotoxin of Clostridium botulinum (C. botulinum) was purified from clone A10B3.5A hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of NSO mouse myeloma cells with splenocytes from mice immunized by intraperitoneal and intravenous injection with C. botulinum neurotoxin subtype A1 (BoNT/A1) toxin and toxoid.1

C. botulinum are anaerobic Gram positive spore-forming bacteria which produce neurotoxins categorized serologically into seven types, A through G.2 Four of the seven serotypes cause human botulism with the vast majority of cases due to serotypes A and B.3 BoNT/A1 is a zinc-binding metalloprotease (holotoxin) that is endogenously cleaved into a heavy (~ 100 kDa) and a light chain (~ 50 kDa) that are held together by a reducible disulfide bond.4

Material Provided:
Each vial of NR-20809 contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:
NR-20809 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:
NR-20809 reacts with the light chain of botulinum neurotoxin type A in western blot assays. The antibody is also reported to be useful for ELISA, RIA, flow cytometry, immunocytochemistry, immunohistochemistry, and immunoprecipitation.1

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Botulinum Neurotoxin Subtype A1, Clone A10B3.5A (produced in vitro), NR-20809."

Biosafety Level: 1

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References:
1. Mukherjee, J. M., personal communication.

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