Monoclonal Anti-Botulinum Neurotoxin Subtype A1 Light Chain, Clone L4G9.1C (produced in vitro)

Catalog No. NR-20811
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For research use only. Not for human use.

Contributor:
Jean M. Mukherjee, D.V.M, Ph.D., Assistant Professor of Infectious Diseases, Department of Biomedical Sciences, Cummings School of Veterinary Medicine, Tufts University, North Grafton, MA, USA

Manufacturer:
BEI Resources

Product Description:
Antibody Class: IgG1k
Mouse monoclonal antibody prepared against the light chain of subtype A1 neurotoxin of Clostridium botulinum (C. botulinum) was purified from clone L4G9.1C 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 recombinant C. botulinum neurotoxin subtype A1 (BoNT/A1) light chain. C. botulinum are anaerobic Gram positive spore-forming bacteria which produce neurotoxins categorized serologically into seven types, A through G. Four of the seven serotypes cause human botulism with the vast majority of cases due to serotypes A and B. 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. Material Provided:
Each vial of NR-20811 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-20811 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-20811 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.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Botulinum Neurotoxin Subtype A1 Light Chain, Clone L4G9.1C (produced in vitro), NR-20811."

Biosafety Level: 1

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


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