C. botulinum BoNT-E Heavy Chain Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 785208

Catalog Number: FAB7135N

100 µg

DESCRIPTION

Species Reactivity	*C. botulinum*
Specificity	Detects *C. botulinum* BoNT-E Heavy Chain in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant Heavy Chains from BoNT-A or BoNT-G is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 785208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant *C. botulinum* BoNT-E Heavy Chain Lys845-Lys1251 Accession # P30995
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Botulinum Neurotoxin Type E is one of the seven serotypes of Botulinum Neurotoxins (BoNTs) produced by various strains of *Clostridium botulinum* (1, 2). BoNTs are synthesized as inactive single chain protein precursors and activated by proteolytic cleavage to generate disulfide-linked two-chain proteins. The 50 kDa light chain contains the catalytic domain, whereas the 100 kDa heavy chain contains an internal translocation domain and a receptor binding domain (3). BoNTs are the most potent protein toxins for humans. As zinc proteases, they cleave SNARE proteins to elicit flaccid paralysis in botulism by blocking acetylcholine release at the neuromuscular junction (2-4). *E. coli*-expressed recombinant light chains are active proteases. In the absence of the heavy chains, however, they lack toxicity because they cannot enter into host cells.

PRODUCT SPECIFIC NOTICES

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