C. botulinum BoNT-D Heavy Chain Alexa Fluor® 350-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 682810

Catalog Number: FAB6639U

100 µg

DESCRIPTION

Species Reactivity	*C. botulinum*
Specificity	Detects recombinant C. botulinum BoNT-D Heavy Chain in direct ELISAs and Western blots. 100% and approximately 10% cross-reactivity with recombinant C. botulinum BoNT-C1 Heavy Chain is observed in Western blots and direct ELISAs, respectively. In direct E
Source	Monoclonal Mouse IgG_{2B} Clone # 682810
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant Clostridium botulinum Neurotoxin Type D Heavy Chain Asn862-Glu1276 Accession # P19321
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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

BoNT-D (Botulinum neurotoxin serotype D) is produced by Clostridium botulinum and inhibits acetylcholine release from neuromuscular junctions. Notably, BoNT-D is not toxic to human cells. The 1276 amino acid (aa) BoNT-D precursor is cleaved to generate a disulfide-linked dimer of the 50-55 kDa light chain peptidase and the 100 kDa heavy chain. The heavy chain contains receptor binding and pore forming domains. The light chain translocates through this pore to the target cell cytosol where it cleaves synaptobrevin, thus blocking synaptic vesicle fusion with the presynaptic membrane. Within aa 862-1276 of the heavy chain, BoNT-D shares 31%, 33%, and 41% aa sequence identity with BoNT-A, -B, and -C1 heavy chains, respectively.

PRODUCT SPECIFIC NOTICES

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