Advanced Targeting Systems

6352 CORTE DEL ABETO, STE B
CARLSBAD, CA 92011 USA
01.858.642.1988 • WWW.ATSBIO.COM

Antibody to Botulinum Toxin Type E (BoNT/E)

RABBIT POLYCLONAL

Catalog Number: AB-44
Quantity: 100 microliters
Format: Liquid antisera, no preservative
Host: Rabbit
Isotype: IgG
Immunogen: recombinant BoNT/E

Background: *Clostridium botulinum* is a Gram-positive bacterium that produces neurotoxins; A through G. Botulinum neurotoxins (BoNTs) induce paralysis of peripheral neurons by inhibiting the formation of neurotransmitter-carrying vesicles to the plasma membrane. Botulinum toxin type E (BoNT/E) is a zinc protease responsible for cleavage of synaptosomal-associated protein 25 (SNAP25) between residues 180 and 181, consequently inhibiting the formation of synaptic vesicles.

Specificity & Preparation: This antibody recognizes catalytic light chain of Botulinum toxin type E (BoNT/E). Recombinant BoNT/E was used as the immunogen. It is routinely tested by ELISA and western blot.

Usage: Applications include ELISA and immunoblotting (ATS in-house; 1:1,000-1:5,000).

Storage: Store the antibody at 4°C for short-term only (less than 24 hours) or -20°C in undiluted aliquots for up to one year. Avoid repeated freezing and thawing. Precautions should be taken to avoid rapid thawing cycles by adding (40-50%) glycerol. Gently spin down material 5-10 seconds in a microfuge before use.

For research use only, not for use as a diagnostic.

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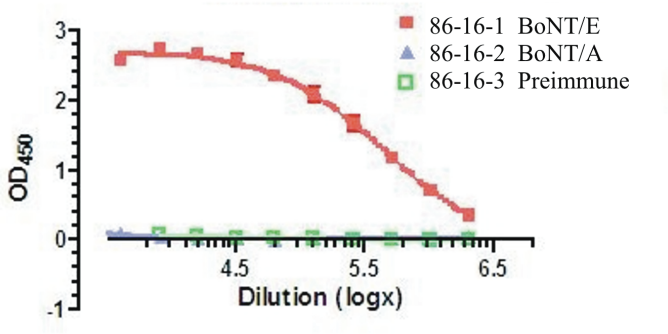
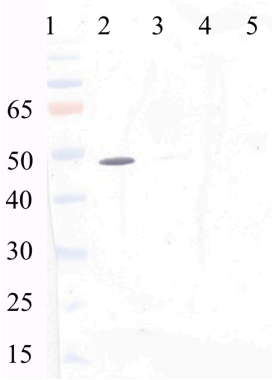
Selected References:

1. Costantin L, Bozzi Y, Richichi C, Viegi A, Antonucci F, Funicello M, Gobbi M, Mennini T, Rossetto O, Montecucco C, Maffei L, Vezzani A, Caleo M. (2005) Antiepileptic effects of botulinum neurotoxin E. *J Neurosci* 25(8):1943-1951.
2. Tonello F, Morante S, Rossetto O, Schiavo G, Montecucco C. (1996) Tetanus and botulism neurotoxins: a novel group of zinc-endopeptidases. *Adv Exp Med Biol* 389:251-260.

To view protocol(s) for this and other products please visit: www.ATSbio.com/library/protocols



An indirect ELISA was performed to detect the presence of BoNT/E antibody. A 96-well plate was coated with antigen (50 ng/well). The sera starting dilution was 1:2,000 with 1:2 serial dilutions across the plate. After developing via HRP-labeled secondary antibody, the plate was read at 450 nM and data acquired using Softmax software.



Lane 1 – Page Ruler (5 µl)
Lane 2 – 100 ng BoNT/E
Lane 3 – 10 ng BoNT/E
Lane 4 – 100 ng BoNT/A
Lane 5 – 10 ng BoNT/A

BoNT/E and BoNT/A (100 ng and 10 ng each) were run on a 10% Bis-tris gel and transferred to PVDF membrane. The blot was blocked with 4% NFM/TBS and incubated overnight with 1:1,000 dilution of anti-BoNT/E. Goat anti-rabbit (HRP) was added to the blot at 1:1,000. The blot was washed and developed with 4-chloro -1-naphthol and hydrogen peroxide.

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