Anti- Tetanus Toxin antibody, mouse monoclonal (TH-11)

64-035　　　100 μg

Backgroud: Tetanus toxin acts by inhibiting neurotransmitter release. It binds to peripheral neuronal synapses, is internalized and moves by retrograde transport up the axon into the spinal cord where it can move between postsynaptic and presynaptic neurons. It inhibits neurotransmitter release by acting as a zinc endopeptidase that catalyzes the hydrolysis of the '76-Gln-|-Phe-77' bond of synaptobrevin-2.

Molecular processing: The toxin encoded 1,315 amino acids with mass of 150,682 Da which is proteolyticallly processed into Light Chain (2-457) and Heavy Chain (458-1315) upon secretion. These remain linked by a disulfide bridge and are non-toxic after separation.

Applications:

1. Western blotting   (1/1,000 dilution)
2. ELISA   (assay dependent)
3. Neutralising of the toxin activity (assay dependent)

Other applications have not been tested.

Immunogen: Tetanus toxoid (Clostridium tetani Harvard vaccine strain)

Reactivity: Reacts with Light Chain of tetanus toxin.

Product: Mouse monoclonal anti-Tetanus Toxin antibody (clone TH-11). Produced by hybridoma cultured in serum-free medium and purified by propriety chromatography under mild conditions.
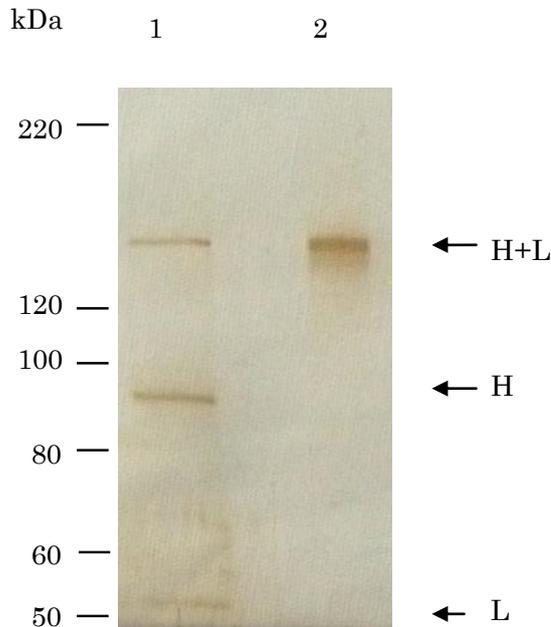
Subtype: Mouse IgG1 kappa

Form: 1 mg/ml in PBS with 50% glycerol. Azide and carrier-free

Shipping and Storage: Sent at 4℃ or -20℃ and upon arrival, spin-down and store at -20℃

Data Link: UniProtKB P04958 Tetanus toxin

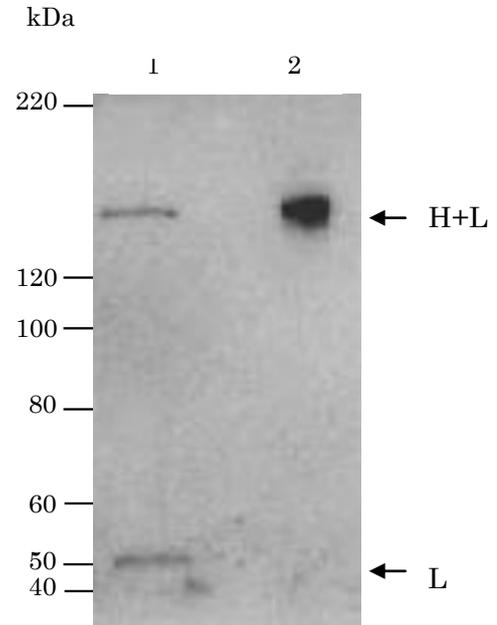**SDS-PAGE & Silver Staining**   **Westen Blotting**

Figure. Western Blot analysis of Tetanus Toxin with anti-Tetanus Toxin antibody (TH11)

Left Panel is SDS-PAGE analysis of partially purified tetanus toxin, silver stained, and Right panel is western blot analysis of the same samples.

Lane 1sample was reduced and Lane 2 sample was unreduced.

Tetanus toxin Heavy and Light chains are so tightly attached and they are difficult to separate completely by heating in SDS in the presence of mercaptoethanol. In the above reduced samples, part of the reduced sample remained attached as shown by "H+L" in lane 1 of Left panel . To dissociate the two attached fragments completely, addition of 2M urea is required

The antibody (TH11) recognizes Light chain of the toxin. The anti-tetanus toxin antibody was used at 1/1,000 dilution.

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