

DESCRIPTION

Species Reactivity	<i>C. tetani</i>
Specificity	Detects TeNT Light Chain in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant TeNT Heavy Chain is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 604023
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant <i>C. tetani</i> TeNT Light Chain Pro2-Gly430 Accession # P04958
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunoprecipitation	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

Tetanus toxin, a member of the peptidase M27 family of proteins, is produced by the anaerobic spore-forming bacteria *Clostridium tetani* as a single-chain polypeptide that is 1315 amino acids (aa) in length. The protein is subsequently cleaved by an endogenous protease to yield the 52 kDa tetanus toxin light chain (TeNT-LC), which is 457 aa in length, and the 98 kDa tetanus toxin heavy chain that is 858 aa long. The light and heavy chains are linked by a disulfide bridge and are non-toxic after separation. Tetanus toxin acts by inhibiting neurotransmitter release. It binds to peripheral neural 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-I-Phe-77' bond of synaptobrevin-2.

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