

Tetanus toxin (tetX) Recombinant Protein | tetX recombinant protein

Recombinant Clostridium tetani Tetanus toxin (tetX), partial

CATALOG #
AAA18711

HOST
E Coli or Yeast or Baculovirus or Mammalian Cell

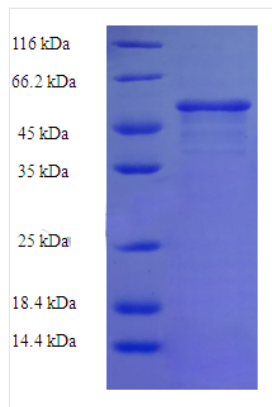
PRODUCT SYNONYMS

Tetanus toxin (tetX); Recombinant Clostridium tetani Tetanus toxin (tetX); partial; Tentoxylisin; tetX recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	2-457aa; Partial, provide Tetanus toxin light chain
Sequence	PITINNFRYS DPVNNDTIIM MEPPYCKGLD IYYKAFKITD RIWIVPERYE FGTKPEDFNP PSSLIEGASE YYDPNYLRTD SDKDRFLQTM VKLFNRIKNN VAGEALLDKI INAIPLYGNS YSLLDKFDTN SNSVSFNLL QDPGATTKS AMLTNLIIFG PGPVLNKNEV RGIVLRVDNK NYFPCRDGFG SIMQMAFCPE YVPTFDNVIE NITSLTIGKS KYFQDPALLL MHELIHVLHG LYGMQVSSHE IIPSKQEIYM QHTYPISAEE LFTFGGQDAN LISIDIKNDL YEKTLNDYKA IANKLSQVTS CNDPNIDIDS YKQIYQQKYQ FDKDSNGQYI VNEDKFQILY NSIMYGFTFI ELGKKFNIKT RLSYFSMNHD PVKIPNLLDD TIYNDTEGFN IESKDLKSEY KGQNMVRVNTN AFRNVDGSG L VSKLIGLCCK IIPPTNIREN LYNRTA
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for tetX recombinant protein

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.

References	Tetanus toxin primary structure, expression in E. coli, and homology with botulinum toxins.Eisel U., Jarausch W., Goretzki K., Henschen A., Engels J., Weller U., Hudel M., Habermann E., Niemann H.EMBO J. 5:2495-2502(1986) The complete nucleotide sequence of tetanus toxin.Fairweather N.F., Lyness V.A.Nucleic Acids Res. 14:7809-7812(1986) The genome sequence of Clostridium tetani, the causative agent of tetanus disease.Brueggemann H., Baeumer S., Fricke W.F., Wiezer A., Liesegang H., Decker I., Herzberg C., Martinez-Arias R., Merkl R., Henne A., Gottschalk G.Proc. Natl. Acad. Sci. U.S.A. 100:1316-1321(2003) Cloning, nucleotide sequencing, and expression of tetanus toxin fragment C in Escherichia coli.Fairweather N.F., Lyness V.A., Pickard D.J., Allen G., Thomson R.O.J. Bacteriol. 165:21-27(1986) Arrangement of disulfide bridges and positions of sulfhydryl groups in tetanus toxin.Krieglstein K., Henschen A., Weller U., Habermann E.Eur. J. Biochem. 188:39-45(1990) Limited proteolysis of tetanus toxin. Relation to activity and identification of cleavage sites.Krieglstein K.G., Henschen A.H., Weller U., Habermann E.Eur. J. Biochem. 202:41-51(1991) Tetanus toxin is a zinc protein and its inhibition of neurotransmitter release and protease activity depend on zinc.Schiavo G., Poulain B., Rossetto O., Benfenati F., Tauc L., Montecucco C.EMBO J. 11:3577-3583(1992) Tetanus and botulinum-B neurotoxins block neurotransmitter release by proteolytic cleavage of synaptobrevin.Schiavo G., Benfenati F., Poulain B., Rossetto O., de Laureto P.P., Dasgupta B.R., Montecucco C.Nature 359:832-835(1992) Structure of the receptor binding fragment HC of tetanus neurotoxin.Umland T.C., Wingert L.M., Swaminathan S., Furey W.F. Jr., Schmidt J.J., Sax M.Nat. Struct. Biol. 4:788-792(1997)
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NCBI AND UNIPROT INFORMATION

NCBI GI #	499413369
NCBI GeneID	24255210
NCBI Accession #	WP_011100836.1
NCBI GenBank Nucleotide #	WP_011100836.1
UniProt Accession #	P04958
Molecular Weight	66.3 kDa
NCBI Official Full Name	tetanus toxin
NCBI Official Symbol	CTC_RS14060
NCBI Protein Information	tetanus toxin
UniProt Protein Name	Tetanus toxin
UniProt Gene Name	tetX
UniProt Synonym Gene Names	Tetanus toxin chain L; Tetanus toxin chain H
UniProt Entry Name	TETX_CLOTE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.