

Clostridium (Tetanus Toxin) Peptide Pool

Clostridium tetani (tetanus toxin) peptide pool for immune cell activation

Catalog #100-1410

~30 µg (18 nmol)/peptide



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Product Description

Clostridium (Tetanus Toxin) Peptide Pool is a lyophilized mixture of 326 peptides from tetanus toxin of *Clostridium tetani* (strain Massachusetts/E88). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 1315 on tetanus toxin. Tetanus toxin entry into central neurons is mediated by the synaptic vesicle-binding protein SV2 (Yeh et al.), where it selectively cleaves synaptobrevin (Link et al.; Schiavo et al.). One unit of this product (i.e. ~30 µg/peptide) is sufficient for stimulating 2.5×10^8 cells.

Product Information

Number of Peptides: 326

Source: *Clostridium tetani* (strain Massachusetts/E88)

Accession Number: P04958

Protein Name: Tetanus toxin

Protein Sequence: MPITINNFYSDPVNNDTIIMMEPPYCKGLDIYYKAFKITDRIWIVPERYEFGTKPEDFNPPSSLIEGASEYYDPNYLRT
DSDKDRFLQTMVKLFNRIKNNVAGEALLDKIINAIPYLGNSYSLLDKFDTNSNSVSFNLEQDPSGATTKSAMLTNLI
IFGPGPVLNKNVEVRGIVLRVDNKNYFPCRDGFGSIMQMAFCPEYVPTFDNVNIENITSLTIGKSKYFQDPALLMHLEI
HVLHGLYGMQVSSHEIIPSKQEIMQHTYPIAEELFTFGGDANLISIDIKNDLYEKTLDYKAIANKLSQVTSCND
PNIDIDSYKQIQKYQFDKDSNGQYIVNEDKFQILYNSIMYGFTIELGKKFNIKTRLSYFSMNHDPVKIPNLLDDTI
YNDTEGFNIESKDLKSEYKGQNMVRNTNAFRNVDGSLVSKLIGLCKKIIPPTNIENLYNRTASLTDLGGELCIKIK
NEDLTFIAEKNSFSEEPQDEIVSYNTKNKPLNFNYSLDKIIVDYNLQSKITLPNDRTTPVTGKIPYAPEYKSNAASTIEI
HNIDDNTIYQLYAQKSPTTLQRITMTNSVDDALINSTKIYSYFSPVISKVNQGAQGILFLQWVRDIIDDFTNESSQKT
TIDKISDVSTIVPYIGPALNIVKQGYEGNFIGALETGTVLLLEIPEITLPVIAALSIAESSTQKEKIITIDNFLEKRYEKW
IEVYKLVKAKWLGTVNTQFQKRSYQMYRSLEYQVDAIKKIIDEYKIYSGPDKEQIADEINNLKNKLEEKANKAMINI
NIFMRESSRSLVNLQMINAEKKQLLEFDTQSKNLMQYIKANSKFIGITELKKLESKINKVFSTPIPFYSYKNLDCWVD
NEEDIDVILKKSTILNLDINNDIISDISGFNSSVITYPDAQLVPGINGKAIHLVNNESSEVIVHKAMDIEYNDMFNNFTVS
FWLRVPKVSASHLEQYGTNEYSISSMKKHLSIGSGWSVSLKGNLIWTLKDSAGEVRQITFRDLDPDKFNAYLANK
WVFITITNDRLSSANLYINGVLMGSAEITGLGAIREDDNITLKLDRCNNNNNQYVSIDKFRIFCKALNPKEIEKLYTSYLS
ITFLRDFWGNPLRYDTEYLLIPVASSSKDVQLKNITDYMYLTNAPSYTNGKLNIIYRRLYNGLKFIKRYTPNNEIDSFV
KSGDFIKLYVSYNNNEHIVGYPKDGNAFNLDRLRVGYNAPGIPLYKKMEAVKLRLDKTYSVQLKLYDDKNASLG
LVGTHNGQIGNDPNRDILIASNWYFNHLKDKILGCDWYFVPTDEGWTND

Gene Name: TetX

Purity: Average 70%

Formulation: Lyophilized as trifluoroacetate salts

Preparation and Storage

Storage: Store at -20°C.

Stability: Stable as supplied until expiry date (EXP) on label.

Preparation: Warm to room temperature (15 - 25°C) before reconstitution. Add pure dimethyl sulfoxide (DMSO; ~40 µL) and dilute with water to the desired concentration. Final concentration of DMSO must be below 1% (v/v) to avoid toxicity in the biological system. If not used immediately, aliquot and store at -20°C. Protect from light. Avoid repeated freeze-thaw cycles.

Related Products

For a complete list of peptide pools, as well as related products available from STEMCELL Technologies, visit www.stemcell.com, or contact us at techsupport@stemcell.com.

References

Link E et al. (1992) Tetanus toxin action: inhibition of neurotransmitter release linked to synaptobrevin proteolysis. *Biochem Biophys Res Commun* 189(2): 1017–23.

Schiavo G et al. (1992) Tetanus toxin is a zinc protein and its inhibition of neurotransmitter release and protease activity depend on zinc. *EMBO J* 11(10): 3577–83.

Yeh FL et al. (2010) SV2 mediates entry of tetanus neurotoxin into central neurons. *PLoS Pathog* 6(11): e1001207.

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