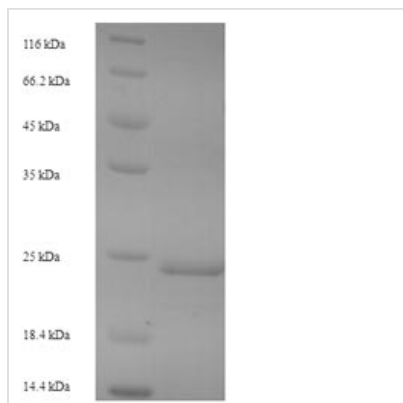




Recombinant Micrurus tener tener Kunitz-type neurotoxin MitTx-alpha

Product Code	CSB-EP516846MUA
Relevance	This heterodimeric toxin potently activates mouse acid-sensing ion channel ASIC1/ACCN2 expressed in Xenopus oocytes. Both alternatively spliced isoforms ASIC1a and ASIC1b are activated, with a higher potency for ASIC1a (EC(50)=9.4 nM) vs ASIC1b (EC(50)=23 nM). The ASIC3/ACCN3 subtype is also sensitive to the heterodimer, but with a lower potency (EC(50)=830 nM). On ASIC2a/ACCN1, the toxin shows a very weak activation, but produces a remarkable potentiation (>100-fold) of protons when the Extracellular domain pH drops below neutrality. The toxin interacts with the Extracellular domain region of the channel, since responses are only observed in the outside-out configuration. In vivo, the heterodimer elicits robust pain-related behavior in mice by activation of ASIC1/ACCN2 channels on capsaicin-sensitive nerve fibers.
Abbreviation	Recombinant Micrurus tener tener Kunitz-type neurotoxin MitTx-alpha protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	G9I929
Product Type	Recombinant Protein
Immunogen Species	Micrurus tener tener (Texas coral snake)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QIRPAFCYEDPPFFQKCGAFVDSYYFNRSRITCVHFFYGQCDVNQNHFTTMS ECNRVCHG
Research Area	Others
Source	E.coli
Protein Names	Recommended name: Neurotoxin MitTx-alpha
Expression Region	25-84aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	23.1kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.