Recombinant SV2A protein (His tag)

Catalog Number	540580
Species	Human
Expression System	E. coli
Accession	Q7L0J3
Molecular Weight	Predictes a molecular mass of 16.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	469-598
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 469-598 aa (Q7L0J3) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a recombinant fragment of the human Synaptic vesicle glycoprotein 2A (SV2A), encompassing amino acids 469-598. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating synaptic vesicle function and neurotransmission regulation. Synaptic vesicle glycoprotein 2A (SV2A) plays a critical role in regulated secretion in neural and endocrine cells, selectively enhancing low-frequency neurotransmission by maintaining the readily releasable pool of secretory vesicles and positively regulating vesicle fusion. It is localized to the presynapse and synaptic vesicle membranes as a multi-pass membrane protein, enriched in secretory vesicles like chromaffin granules and insulin granules. Additionally, SV2A serves as a receptor for botulinum neurotoxin type A, with glycosylation enhancing this interaction, highlighting its significance in both normal physiology and microbial pathogenesis.