Recombinant SH3G2 protein (His tag)

Catalog Number	545783
Synonyms	EEN-B1; Endophilin-1; SH3 domain protein 2A; SH3 domain-containing GRB2-like protein 2
Species	Human
Expression System	E. coli
Accession	Q99962
Molecular Weight	Predictes a molecular mass of 30.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-256
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-256 aa (Q99962) 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	Recombinant Human Endophilin-A1 (SH3GL2) Fragment (aa 1-256) is a high-purity protein designed for studying BAR domain-mediated functions. This fragment is ideal for investigating membrane curvature sensing, synaptic vesicle endocytosis, and early endosome trafficking in neuronal and cellular research applications. Endophilin-A1 (SH3GL2) is a multifunctional protein implicated in synaptic vesicle endocytosis and membrane remodeling processes. According to UniProt annotations, it recruits proteins to high-curvature membranes and is required for BDNF-dependent dendrite outgrowth. The protein cooperates with SH3GL2 in mediating BDNF-NTRK2 early endocytic trafficking and signaling from early endosomes. Subcellular localization studies indicate its presence in the cytoplasm, peripheral membrane regions, early endosomes, and presynaptic compartments. The provided fragment (aa 1-256) encompasses the complete BAR domain (aa 18-249), enabling focused investigation of its membrane-binding and curvature-sensing capabilities without interference from other functional regions.