Recombinant SSH protein (His tag)

Catalog Number	532797
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q6NN85
Gene ID	42986
Molecular Weight	Predictes a molecular mass of 40.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	198-531
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 198-531 aa (Q6NN85) 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 fragment of Drosophila melanogaster Protein phosphatase Slingshot (EC 3.1.3.16/3.1.3.48), encompassing amino acids 198-531. This fragment includes the complete DEK-C and Tyrosine-protein phosphatase domains, making it an ideal tool for studying actin cytoskeleton regulation and phosphatase activity in a purified, functional form. Protein phosphatase Slingshot, encoded by the ssh gene, is a key regulator of actin filament dynamics. It functions by dephosphorylating and activating the actin-binding protein cofilin, which subsequently promotes actin filament disassembly. This activity is essential for cellular processes such as axon growth. The full-length protein is localized to the cytoplasm and cytoskeleton, where it directly influences actin remodeling. The provided recombinant fragment allows focused investigation of its phosphatase domains and their specific roles in cofilin activation and actin regulation.