Recombinant HOW protein (His tag)

Catalog Number	532523
Synonyms	KH domain protein KH93F; Protein muscle-specific; Protein struthio; Protein wings held out; Putative RNA-binding protein; Quaking-related 93F
Species	Drosophila melanogaster
Expression System	E. coli
Accession	O01367
Gene ID	42596
Molecular Weight	Predictes a molecular mass of 30.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-261
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-261 aa (O01367) 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 held out wings (KH domain protein KH93F), encompassing the complete KH RNA-binding domain (amino acids 1-261). This high-purity protein is an essential tool for studying RNA-binding mechanisms, muscle development regulation, and dosage compensation processes. Protein held out wings (encoded by the 'how' gene) is a crucial RNA-binding protein involved in multiple developmental processes in Drosophila melanogaster. It plays a vital role in muscle development, including embryogenesis, somatic muscle formation, myotube migration, and metamorphosis-related muscle reorganization. The protein is also essential for steroid regulation of muscle development and heart rate control. Additionally, it functions in integrin-mediated cell adhesion in wing blades and, in collaboration with Sxl protein, acts as an inhibitor of dosage compensation in females by binding to the 5'-UTR of msl-2 transcripts and promoting nuclear retention of msl-2 mRNAs. The protein is localized to the nucleus, where it performs its RNA-binding regulatory functions.