Recombinant EI3D2 protein (His tag)

Catalog Number	534894
Synonyms	eIF3d-2; Eukaryotic translation initiation factor 3 subunit 7-2
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VGC7
Gene ID	41475
Molecular Weight	Predictes a molecular mass of 46.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	162-551
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 162-551 aa (Q9VGC7) 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 Drosophila melanogaster eIF3d-2 protein fragment (residues 162-551) is a stable, soluble construct ideal for structural and biochemical studies. This fragment represents a key region of the eukaryotic translation initiation factor 3 subunit D-2, which plays a specialized role in mRNA cap recognition and translation initiation of cell proliferation-related mRNAs. Eukaryotic translation initiation factor 3 subunit D-2 (eIF3d-2) is a mRNA cap-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex. This complex is essential for protein synthesis of a specialized repertoire of mRNAs and, in conjunction with other initiation factors, facilitates the binding of mRNA and methionyl-tRNAi to the 40S ribosome. The eIF-3 complex specifically targets and initiates translation of mRNAs involved in cell proliferation, with eIF3d-2 playing a critical role in recognizing and binding the 7-methylguanosine cap of these specific mRNAs. The protein is localized in the cytoplasm, where it participates in the initiation phase of protein synthesis.