Recombinant DSH protein (His tag)

Catalog Number	533258
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P51140
Gene ID	32078
Molecular Weight	Predictes a molecular mass of 27.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	249-478
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 249-478 aa (P51140) 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 Segment polarity protein dishevelled fragment (residues 249-478) from Drosophila melanogaster, encompassing the complete PDZ and DEP functional domains. This high-purity protein fragment serves as an essential tool for investigating Wnt signaling pathways, planar cell polarity, and specific domain-mediated protein interactions in developmental biology research. The full-length Segment polarity protein dishevelled (Dsh) is crucial for establishing coherent arrays of polarized cells and segments during embryonic development in Drosophila melanogaster. It plays a fundamental role in wingless (wg) signaling pathway, potentially through reception of wg signals by target cells and subsequent redistribution of arm protein in response to these signals. This signaling is essential for establishing both planar cell polarity and cellular identity. Subcellular localization studies show Dsh is found in the cytoplasm, nucleus, and as a peripheral membrane protein when hyperphosphorylated, indicating its dynamic cellular distribution and regulation during signaling processes.