Recombinant FRIZ2 protein (His tag)

Catalog Number	530830
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	G5ECQ2
Gene ID	178768
Molecular Weight	Predictes a molecular mass of 16.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	18-148
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 18-148 aa (G5ECQ2) 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 Frizzled-2 (cfz-2) Fragment (residues 18-148) from Caenorhabditis elegans is a high-purity protein designed for studying Wnt signaling pathways. This 131-amino acid fragment fully encompasses the conserved FZ domain, making it an ideal tool for investigating receptor-ligand interactions and neuronal development mechanisms. Frizzled-2 serves as a receptor for Wnt proteins in Caenorhabditis elegans, primarily coupling to the beta-catenin canonical signaling pathway that regulates disheveled proteins, inhibits GSK-3 kinase, and activates Wnt target genes. Evidence suggests potential involvement in PKC-calcium signaling pathways, likely through G-protein interactions. Functionally, Frizzled-2 is critical for neuronal migration and axon guidance in multiple cell types including canal-associated neurons, hermaphrodite-specific neurons, and anterior lateral microtubule neurons. It directs cell migration through interactions with other frizzled proteins and Wnt ligands (cwn-1, cwn-2, egl-20), participates in head ganglion organization, and regulates nerve ring positioning and RME GABAergic motor neuron outgrowth along the anterior-posterior axis. As a multi-pass membrane protein localized to the cell membrane, it plays fundamental roles in developmental neurobiology and Wnt-mediated signaling cascades.