Recombinant FZD3 protein (His tag)

Catalog Number	543692
Synonyms	Fz-3; hFz3
Species	Human
Expression System	E. coli
Accession	Q9NPG1
Molecular Weight	Predictes a molecular mass of 23.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	23-205
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 23-205 aa (Q9NPG1) 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 Human Frizzled-3 (Fz-3) Fragment (aa 23-205) is a high-purity protein encompassing the complete FZ functional domain. This fragment serves as an essential tool for investigating Wnt signaling pathways, axon guidance, and planar cell polarity mechanisms in neural development and tissue morphogenesis. Frizzled-3 (FZD3) is a Wnt protein receptor critical for canonical beta-catenin signaling and planar cell polarity regulation. It mediates disheveled protein activation, GSK-3 kinase inhibition, and nuclear beta-catenin accumulation to control Wnt-responsive genes. Functionally, it guides early axon growth and neural tract formation in the central nervous system (e.g., corpus callosum, corticospinal tract) and peripheral motor neurons, while also directing cranial neural crest migration and auditory cell stereocilia orientation. As a multi-pass membrane protein localized to the cell surface and apical membrane, it collaborates with FZD6 in polarity establishment and neural tube closure, underscoring its role in neurogenesis and sensory pathway development.