Recombinant FZD5 protein (His tag)

Catalog Number	542633
Synonyms	Fz-5; hFz5; FzE5
Species	Human
Expression System	E. coli
Accession	Q13467
Molecular Weight	Predictes a molecular mass of 15.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	27-150
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 27-150 aa (Q13467) 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	Introducing the recombinant Frizzled-5 (Fz-5) fragment (amino acids 27-150), a high-purity protein designed to encompass the complete FZ functional domain. This fragment serves as an essential tool for researchers investigating Wnt signaling pathways, offering a targeted approach to study receptor-ligand interactions and domain-specific functions in neuronal development, angiogenesis, and tissue morphogenesis. Frizzled-5 (FZD5) is a human multi-pass transmembrane receptor that plays a critical role in the canonical Wnt/β-catenin signaling pathway. It acts as a receptor for Wnt proteins such as WNT2, WNT10B, WNT5A, and WNT7A, with WNT7A activation specifically promoting synapse formation in neurons. The protein is implicated in transmitting polarity information during tissue morphogenesis and is essential for yolk sac angiogenesis, placental vascularization, and ocular development. Subcellular localization studies show Frizzled-5 is present at the plasma membrane, Golgi apparatus, synapses, perikarya, dendrites, and axons, highlighting its diverse roles in cellular communication and developmental processes.