

Recombinant Protein Technical Manual Recombinant Mouse Frizzled 1/FZD1 Protein (His Tag) RPES4840

## Product Data:

Product SKU: RPES4840

**Size:** 50µg

Species: Mouse

Expression host: HEK293 Cells

**Uniprot:** NP\_067432.2

Protein Information:	
Molecular Mass:	21 kDa
AP Molecular Mass:	35-40 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 97 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per $\mu g$ of the protein as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Frizzled; Fz; mFz1; Fzd1; Frizzled homolog 1

## Sequence: Met 1-His 248

## Background:

Frizzled, also known as FZD1, belongs to the G-protein coupled receptor Fz/Smo family. FZD1 contains a signal peptide, a cysteine-rich domain in the N-terminal extracellular region, 7 transmembrane domains, and a C-terminal PDZ domain-binding motif. FZD1 is expressed in adult heart, placenta, lung, kidney, pancreas, prostate, and ovary and in fetal lung and kidney. Frizzled is a family of G protein-coupled receptor proteins that serve as receptors in the Wnt signaling pathway and other signaling pathways. When activated, Frizzled leads to activation of Dishevelled in the cytosol. Frizzled proteins and the genes encoding them have been identified in an array of animals, from sponges to humans. Frizzled proteins play key roles in governing cell polarity, embryonic development, formation of neural synapses, cell proliferation, and many other processes in developing and adult organisms. Most of frizzled receptors are coupled to the beta-catenin canonical signaling pathway, which leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin and activation of Wnt target genes.