



Recombinant Protein Technical Manual  
Recombinant Human Frizzled-5/FZD5 Protein (His  
Tag)  
RPES2840

Product Data:

**Product SKU:** RPES2840

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_003459.2

Protein Information:

**Molecular Mass:** 17.6 kDa

**AP Molecular Mass:** 25-30 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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:** C2orf31;HFZ5

## Immunogen Information:

**Sequence:** Met 1-Pro 167

## Background:

Wnt signaling is involved in a variety of embryonic development processes of nonvertebrates and vertebrates, where it determines cell motility, cell polarity, differentiation, proliferation and apoptosis, as well as formation of neural synapses. Various homologs of the Wingless protein, termed WNT factors, represent key mediators and act through a receptor complex comprised of members of the Frizzled and low density lipoprotein-related receptors (LRP). 19 WNTs, 10 Frizzled, and 2 LRP proteins have been identified. Frizzled is a family of G protein-coupled receptor proteins consisting of a divergent signal peptide, a highly conserved extracellular cysteine-rich domain (CRD), a variable-length linker region, a seven-pass transmembrane domain, and a variable-length C-terminal tail. Frizzled 5 (FZD5) is believed to be the receptor for the Wnt5A ligand, and also interactions with Wnt10B, Wnt2B, and Wnt 7A functionally. Recent studies of WNT5A/Frizzled-5 signaling have revealed an unexpected and novel role in orchestrating adaptive immunity in response to microbial stimulation. In addition, FZD5 is also implicated in the survival of mature neurons in the parafascicular nucleus of the thalamus.