



# Recombinant Protein Technical Manual

## Recombinant Mouse Frizzled0/FZD10 Protein (Fc Tag)

RPES1204

### Product Data:

**Product SKU:** RPES1204

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_780493.1

### Protein Information:

**Molecular Mass:** 43 kDa

**AP Molecular Mass:** 52 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 90 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg 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:** Fz0

## Immunogen Information:

**Sequence:** Met 1-Gly 162

## Background:

Frizzled0, also known as Fz0, CD350 and FZD10, is a multi-pass membrane protein which belongs to the G-protein coupled receptor Fz/Smo family. Frizzled0 / FZD10 is abundantly expressed in the cerebellum, followed by cerebral cortex, medulla and spinal cord; very low levels in total brain, frontal lobe, temporal lobe and putamen. It is weakly expressed in adult brain, heart, lung, skeletal muscle, pancreas, spleen and prostate. Frizzled0 / FZD10 is a receptor for Wnt proteins. 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. A second signaling pathway involving PKC and calcium fluxes has been seen for some family members, it is not yet clear if it represents a distinct pathway or if it can be integrated in the canonical pathway, as PKC seems to be required for Wnt-mediated inactivation of GSK-3 kinase. Both pathways seem to involve interactions with G-proteins. Frizzled0 / FZD10 may also be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues.