

### Synonym

FZD2,Frizzled-2,Fz-2,hFz2,FzE2

#### Source

Human Frizzled-2, Fc Tag(FZ2-H5255) is expressed from human 293 cells (HEK293). It contains AA Gln 24 - Pro 190 (Accession # Q14332-1). Predicted N-terminus: Gln 24

## **Molecular Characterization**

Frizzled-2(Gln 24 - Pro 190) Fc(Pro 100 - Lys 330)
Q14332-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 44.4 kDa. The protein migrates as 50-62 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### Storage

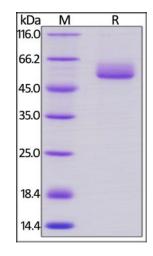
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**

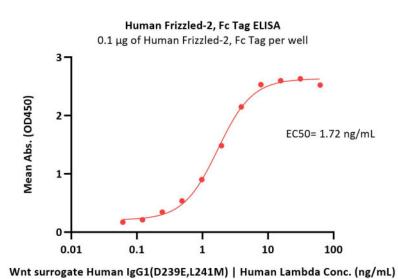


Human Frizzled-2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**







Immobilized Human Frizzled-2, Fc Tag (Cat. No. FZ2-H5255) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Wnt surrogate Human IgG1(D239E,L241M) | Human Lambda with a linear range of 0.1-8 ng/mL (QC tested).

### Background

Frizzled-2 (FZD2) is also known as FzE2, which belongs to the G-protein coupled receptor Fz/Smo family. 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. FZD2 contains one FZ (frizzled) domain. FZD2 may be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues. The Lys-Thr-X-X-Trp motif of FZD2 interacts with the PDZ doman of Dvl (Disheveled) family members and is involved in the activation of the Wnt/beta-catenin signaling pathway.

# **Clinical and Translational Updates**

