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

Catalog Number: PKSH031583

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

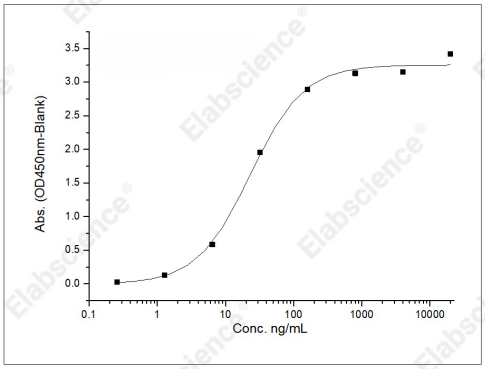
Description

Species	Human
Source	HEK293 Cells-derived Human Frizzled-5/FZD5 protein Met 1-Pro 167, with an C-terminal His
Calculated MW	65 kDa
Observed MW	25-30 kDa
Accession	NP_003459.2
Bio-activity	Not validated for activity

Properties

Purity	> 97% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Immobilized Recombinant Human Frizzled-5 / FZD5 Protein (His Tag) (Cat: PKSH031583) at 2μg/mL (100μL/well) can bind pan-FZD antibody, Human IgG2, the EC_{50} is 12-36 ng/mL.

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.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com