

Recombinant Human Frizzled-10/FZD10 Protein (His Tag)

Catalog No. PKSH030507

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

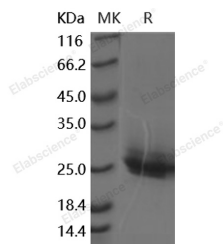
Description

| | |
|------------------------------------|-----------------------------|
| Synonyms | CD350;FZ-10;Fz10;FzE7;hFz10 |
| Species | Human |
| Expression Host | HEK293 Cells |
| Sequence | Met 1-Gly161 |
| Accession | NP_009128.1 |
| Calculated Molecular Weight | 17.5 kDa |
| Observed molecular weight | 25.4 kDa |
| Tag | C-His |
| Bioactivity | Not validated for activity |

Properties

| | |
|-----------------------|---|
| Purity | > 95 % 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% Tween80 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



> 95 % as determined by reducing SDS-PAGE.

Background

Frizzled-10, also known as Fz-10, CD350 and FZD10, is a multi-pass membrane protein which belongs to the G-protein coupled receptor Fz/Smo family. Frizzled-10 / FZD10 is abundantly expressed in the cerebellum, followed by cerebral

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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. Frizzled-10 / 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. Frizzled-10 / FZD10 may also be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues.