## Recombinant Mouse Frizzled-10/FZD10 Protein (Fc Tag)

## Catalog Number: PKSM040610

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

> 90 % as determined by reducing SDS-PAGE.

14.4

## Background

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Frizzled-10, also known as Fz-10, CD350 and FZD10, is a multi-pass membrane protein which belongs to theG-protein coupled receptor Fz/Smo family. Frizzled-10 / 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. 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.