Mouse Frizzled-10 / FZD10 Protein (His Tag)

Catalog Number: **50568-M08H**

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General Information

Gene Name Synonym:

CD350; FZ-10; Fz10; FzE7; hFz10; Fz-10

Protein Construction:

A DNA sequence encoding the N-terminal segment of mouse FZD10 (NP_780493.1) (Met 1-Gly 162) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ile 22

Molecular Mass:

The secreted recombinant mouse FZD10 comprises 152 amino acids and has a predicted molecular mass of 17.4 kDa. As a result of glycosylation, the apparent molecular mass of rm FZD10 is approximately 23 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

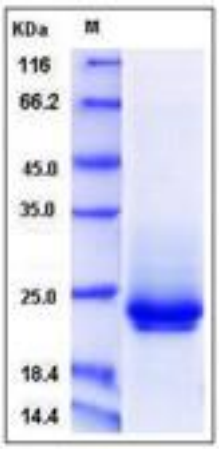
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Mouse 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 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.

References

1.Kwon H.S., *et al.*,(2009), Myocilin is a modulator of Wnt signaling. Mol. Cell. Biol. 29:2139-2154.
2.The MGC Project Team, *et al.*, (2004), The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC).Genome Res. 14:2121-2127.
3.Tanaka S., *et al.*,(1998), A novel frizzled gene identified in human esophageal carcinoma mediates APC/beta-catenin signals.Proc. Natl. Acad. Sci. U.S.A. 95:10164-10169.