abcam

Product datasheet

Recombinant Human Frizzled 6 protein ab152855

1 Image

Description

Product name Recombinant Human Frizzled 6 protein

Expression system Wheat germ

Accession O60353

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence PNIETFLCKAFVPTCIEQIHVVPPCRKLCEKVYSDCKKLIDT

FGIRWPEE

LECDRLQYCDETVPVTFDPHTEFLGPQKKTEQVQRDIGF

WCPRHLKTSGG QGYKFLGIDQC

Predicted molecular weight 38 kDa including tags

Amino acids 71 to 181

Specifications

Our **Abpromise guarantee** covers the use of **ab152855** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Western blot

ELISA

SDS-PAGE

Form Liquid

Additional notes

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

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General Info

Function

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, but 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. May be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues. Together with FZD3, is involved in the neural tube closure and plays a role in the regulation of the establishment of planar cell polarity (PCP), particularly in the orientation of asymmetric bundles of stereocilia on the apical faces of a subset of auditory and vestibular sensory cells located in the inner ear.

Tissue specificity

Detected in adult heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, thymus, prostate, testis, ovary, small intestine and colon. In the fetus, expressed in brain, lung, liver and kidney.

Involvement in disease

Nail disorder, non-syndromic congenital, 10

Rare non-synonymous variants in FZD6 may contribute to neural tube defects, congenital malformations of the central nervous system and adjacent structures related to defective neural tube closure during the first trimester of pregnancy.

Sequence similarities

Belongs to the G-protein coupled receptor Fz/Smo family.

Contains 1 FZ (frizzled) domain.

Domain

Lys-Thr-X-X-X-Trp motif interacts with the PDZ doman of Dvl (Disheveled) family members and is involved in the activation of the Wnt/beta-catenin signaling pathway.

The FZ domain is involved in binding with Wnt ligands.

Post-translational modifications

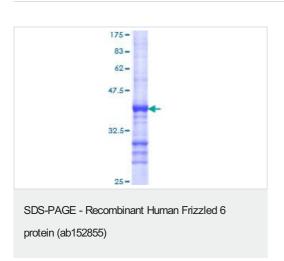
Ubiquitinated by ZNRF3, leading to its degradation by the proteasome.

Cellular localization

Membrane. Cell membrane. Cell surface. Apical cell membrane. Cytoplasmic vesicle membrane.

Colocalizes with FZD3 at the apical face of cells (By similarity).

Images



12.5% SDS-PAGE analysis of ab152855 stained with Coomassie Blue.

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