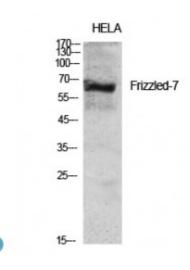


Anti-Frizzled-7 antibody



Description

Frizzled-7 is a protein encoded by the FZD7 gene which is approximately 63,6 kDa. Frizzled-7 is localised to the cell membrane. It is involved in the Wnt signalling pathway and pluripotency, CDK-mediated phosphorylation and removal of Cdc6 and mTOR signalling pathway. It is a 7-transmembrane domain protein that is a receptor for Wnt signalling proteins. It may also be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and in differentiated tissues. Frizzled-7 is expressed highly in adult skeletal muscle and foetal kidney. Mutations in the FZD7 gene may result in exudative vitreoretinopathy and hepatocellular carcinoma. STJ93151 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of Frizzled-7 protein.

Model STJ93151

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, IF, WB

ImmunogenSynthesized peptide derived from human Frizzled-7

Immunogen Region 20-100 aa, N-terminal

Gene ID 8324
Gene Symbol FZD7

Dilution range WB 1:500-1:2000IF 1:200-1:1000ELISA 1:20000

Specificity Frizzled-7 Polyclonal Antibody detects endogenous levels of Frizzled-7

protein.

Tissue Specificity High expression in adult skeletal muscle and fetal kidney, followed by fetal

lung, adult heart, brain, and placenta. Specifically expressed in squamous cell

esophageal carcinomas.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Frizzled-7 Fz-7 hFz7 FzE3

Molecular Weight 64 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:4045OMIM:603410</u>

Alternative Names Frizzled-7 Fz-7 hFz7 FzE3

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.

Sequence and Domain Family Lys-Thr-X-X-Trp motif interacts with the PDZ domain 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.

Cellular Localization Cell membrane Endosome membrane. Associated to the plasma membrane in

the presence of FZD7 and phosphatidylinositol 4,5-bisphosphate (PIP2).

Localized in recycling endosomes in other conditions.

Post-translational

Modifications

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