

FZD9 / Frizzled 9 Antibody (N-Terminus) Rabbit Polyclonal Antibody Catalog # ALS10810

Specification

FZD9 / Frizzled 9 Antibody (N-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>000144</u> Human Rabbit Polyclonal 64kDa KDa

FZD9 / Frizzled 9 Antibody (N-Terminus) - Additional Information

Gene ID 8326

Other Names Frizzled-9, Fz-9, hFz9, FzE6, CD349, FZD9, FZD3

Target/Specificity Human FZD9 / Frizzled 9. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage Long term: -70°C; Short term: +4°C

Precautions FZD9 / Frizzled 9 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

FZD9 / Frizzled 9 Antibody (N-Terminus) - Protein Information

Name FZD9

Synonyms FZD3

Function

Receptor for WNT2 that is 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 (By similarity). Plays a role in neuromuscular junction (NMJ) assembly by negatively regulating the clustering of acetylcholine receptors (AChR) through the beta-catenin canonical signaling pathway (By similarity). May play a role in neural progenitor cells (NPCs) viability through the beta- catenin canonical signaling pathway by negatively regulating cell cycle arrest leading to inhibition of neuron apoptotic process (PubMed:27509850). During hippocampal development, regulates neuroblast proliferation and apoptotic cell death. Controls bone formation through non canonical Wnt signaling mediated via ISG15. Positively



regulates bone regeneration through non canonical Wnt signaling (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q9R216}; Multi-pass membrane protein. Note=Relocalizes DVL1 to the cell membrane leading to phosphorylation of DVL1 and AXIN1 relocalization to the cell membrane. {ECO:0000250|UniProtKB:Q8K4C8}

Tissue Location

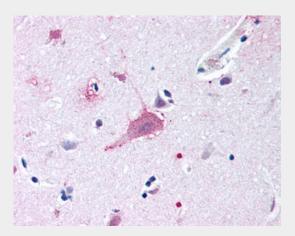
Expressed predominantly in adult and fetal brain, testis, eye, skeletal muscle and kidney. Moderately expressed in pancreas, thyroid, adrenal cortex, small intestine and stomach Detected in fetal liver and kidney. Expressed in neural progenitor cells (PubMed:27509850).

FZD9 / Frizzled 9 Antibody (N-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FZD9 / Frizzled 9 Antibody (N-Terminus) - Images



Anti-FZD9 / Frizzled 9 antibody ALS10810 IHC of human brain, neurons and glia. FZD9 / Frizzled 9 Antibody (N-Terminus) - Background

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.

FZD9 / Frizzled 9 Antibody (N-Terminus) - References



Wang Y.-K., et al. Hum. Mol. Genet. 6:465-472(1997). Hillier L.W., et al. Nature 424:157-164(2003). Tanaka S., et al. Proc. Natl. Acad. Sci. U.S.A. 95:10164-10169(1998).