

FZD5 / Frizzled 5 Antibody (aa461-510) Rabbit Polyclonal Antibody Catalog # ALS16839

Specification

FZD5 / Frizzled 5 Antibody (aa461-510) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC, IF, WB <u>013467</u> <u>7855</u> Human, Mouse, Rat Rabbit Polyclonal IgG 64507

FZD5 / Frizzled 5 Antibody (aa461-510) - Additional Information

Gene ID 7855

Other Names FZD5, C2orf31, DKFZP434E2135, Frizzled family receptor 5, Fz5, Fzd-5, FzE5, Frizzled 5, Frizzled-5, Wnt receptor, Fz-5, HFZ5

Target/Specificity FZD5 Antibody detects endogenous levels of total FZD5 protein.

Reconstitution & Storage PBS (without Mg2+, Ca2+), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C for up to one year.

Precautions FZD5 / Frizzled 5 Antibody (aa461-510) is for research use only and not for use in diagnostic or therapeutic procedures.

FZD5 / Frizzled 5 Antibody (aa461-510) - Protein Information

Name FZD5

Synonyms C2orf31

Function

Receptor for Wnt proteins (PubMed:9054360, PubMed:10097073, PubMed:20530549). Can activate WNT2, WNT10B, WNT5A, but not WNT2B or WNT4 (in vitro); the in vivo situation may be different since not all of these are known to be coexpressed (By similarity). In neurons, activation of WNT7A promotes formation of synapses (PubMed:20530549). Functions in



the canonical Wnt/beta-catenin signaling pathway. The canonical Wnt/beta-catenin signaling pathway 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). 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 (Probable). Plays a role in yolk sac angiogenesis and in placental vascularization (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8CHL0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8CHL0}. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9EQD0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9EQD0}. Synapse {ECO:0000250|UniProtKB:Q8CHL0}. Perikaryon {ECO:0000250|UniProtKB:Q8CHL0}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8CHL0}. Cell projection, axon {ECO:0000250|UniProtKB:Q8CHL0}. Note=Localized at the plasma membrane and also found at the Golgi. {ECO:0000250|UniProtKB:Q9EQD0}

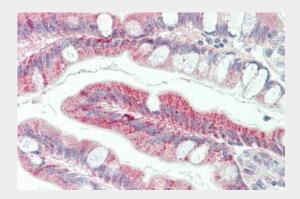
Volume 50 μl

FZD5 / Frizzled 5 Antibody (aa461-510) - Protocols

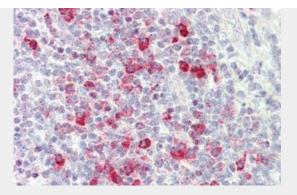
Provided below are standard protocols that you may find useful for product applications.

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

FZD5 / Frizzled 5 Antibody (aa461-510) - Images



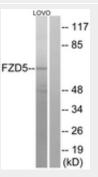
Anti-FZD5 / Frizzled 5 antibody IHC staining of human small intestine.



Anti-FZD5 / Frizzled 5 antibody IHC staining of human tonsil.



Immunofluorescence of A549 cells, using FZD5 Antibody.



Western blot of extracts from LOVO cells, using FZD5 Antibody.

FZD5 / Frizzled 5 Antibody (aa461-510) - 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. Interacts specifically with Wnt5A to induce the beta- catenin pathway.

FZD5 / Frizzled 5 Antibody (aa461-510) - References

Wang Y.,et al.J. Biol. Chem. 271:4468-4476(1996). Saitoh T.,et al.Int. J. Oncol. 19:105-110(2001). Ota T.,et al.Nat. Genet. 36:40-45(2004). Hillier L.W.,et al.Nature 434:724-731(2005). Tanaka S.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:10164-10169(1998).