

Frizzled 5 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51219

Product Information

Application	WB, IHC-P
Primary Accession	<u>Q13467</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64507

Additional Information

Gene ID	7855
Other Names	Frizzled-5, Fz-5, hFz5, FzE5, FZD5, C2orf31
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	FZD5
Synonyms	C2orf31
Function	Receptor for Wnt proteins (PubMed: <u>10097073</u> , PubMed: <u>20530549</u> , PubMed: <u>26908622</u> , PubMed: <u>9054360</u>). Functions in the canonical Wnt/beta- catenin signaling pathway. In vitro activates WNT2, WNT10B, WNT5A, but not WNT2B or WNT4 signaling (By similarity). In neurons, activation by WNT7A promotes formation of synapses (PubMed: <u>20530549</u>). 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). Plays a role in ocular development (PubMed: <u>26908622</u>).
Cellular Location	Cell membrane; 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

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.

References

Wang Y.,et al.J. Biol. Chem. 271:4468-4476(1996). Saitoh T.,et al.Int. J. Oncol. 19:105-110(2001). 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). He X.,et al.Science 275:1652-1654(1997).

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