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FZD9 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50204

Product Information

Application	WB, IF
Primary Accession	O00144
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	64466

Additional Information

Gene ID	8326
Other Names	Frizzled-9, Fz-9, hFz9, FzE6, CD349, FZD9, FZD3
Dilution	WB~~ 1:1000 IF~~1:100
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

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).

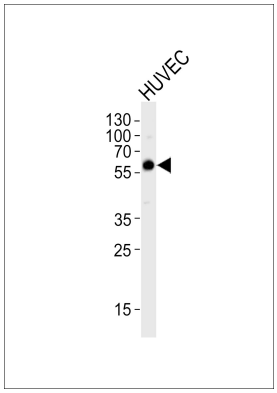
Background

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.

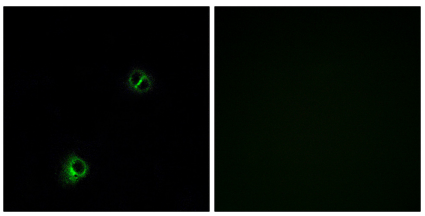
References

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).

Images



Western blot analysis of lysate from HUVEC cell line,using FZD9 Antibody(G114). G114 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.



Immunofluorescence analysis of A549 cells, using FZD9 antibody.