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FZD4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9471b

Product Information

Application	WB, E
Primary Accession	Q9ULV1
Other Accession	Q9QZH0, Q61088, Q9IA05
Reactivity	Human
Predicted	Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23031
Calculated MW	59881
Antigen Region	495-522

Additional Information

Gene ID	8322
Other Names	Frizzled-4, Fz-4, hFz4, FzE4, CD344, FZD4
Target/Specificity	This FZD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 495-522 amino acids from the C-terminal region of human FZD4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FZD4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FZD4
Function	Receptor for Wnt proteins (PubMed: 30135577). Most frizzled receptors are coupled to the beta-catenin (CTNNB1) canonical signaling pathway, which leads to the activation of disheveled proteins, inhibition of GSK-3 kinase,

nuclear accumulation of beta-catenin (CTNNB1) and activation of Wnt target genes (PubMed:30135577). Plays a critical role in retinal vascularization by acting as a receptor for Wnt proteins and norrin (NDP) (By similarity). In retina, it can be activated by Wnt protein-binding and also by Wnt-independent signaling via binding of norrin (NDP), promoting in both cases beta-catenin (CTNNB1) accumulation and stimulation of LEF/TCF-mediated transcriptional programs (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.

Cellular Location Cell membrane; Multi-pass membrane protein

Tissue Location Almost ubiquitous (PubMed:10544037). Largely expressed in adult heart, skeletal muscle, ovary, and fetal kidney (PubMed:10544037). Moderate amounts in adult liver, kidney, pancreas, spleen, and fetal lung, and small amounts in placenta, adult lung, prostate, testis, colon, fetal brain and liver (PubMed:10544037)

Background

FZD4 may play a role as a positive regulator of the Wingless type MMTV integration site signaling pathway.

References

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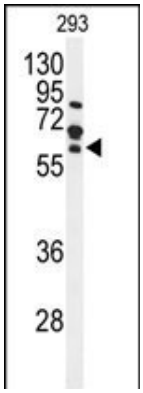
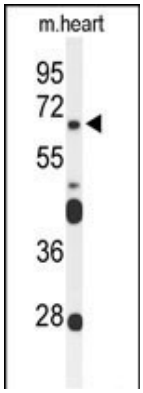
?Drenser, K.A., et al. Arch. Ophthalmol. 127(12):1649-1654(2009)
?Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009)
?Robitaille, J.M., et al. Ophthalmic Genet. 30(1):23-30(2009)
?Tickenbrock, L., et al. Int. J. Oncol. 33(6):1215-1221(2008)

Images



Western blot analysis of FZD4 Antibody (C-term) (Cat. #AP9471b) in 293 cell line lysates (35ug/lane).FZD4 (arrow) was detected using the purified Pab;

Western blot analysis of FZD4 Antibody (C-term) (Cat. #AP9471b) in mouse heart tissue lysates (35ug/lane). FZD4 (arrow) was detected using the purified Pab.



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