10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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, Bovine, Canine, Rabbit
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)

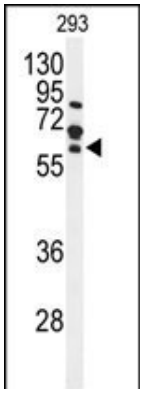
Background

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

References

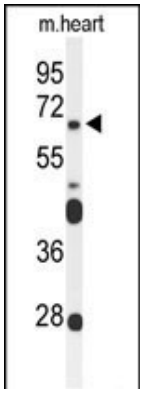
?Ells, A., et al. Ophthalmic Genet. 31(1):37-43(2010)
?Drenser, K.A., et al. Arch. Ophthalmol. 127(12):1649-1654(2009)
?Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009)
?Robitaille, J.M., et al. Ophthalmic Genet. 30(1):23-30(2009)
?Tickenbrock, L., et al. Int. J. Oncol. 33(6):1215-1221(2008)

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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.