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

Frizzled 8 Rabbit pAb

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Catalog # AP55094

Product Information

Application	WB
Primary Accession	Q9H461
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73300
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Frizzled 8
Epitope Specificity	61-160/694
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane. Golgi apparatus. Cell membrane. Colocalizes with GOPC at the Golgi apparatus.
SIMILARITY	Belongs to the G-protein coupled receptor Fz/Smo family. Contains 1 FZ (frizzled) domain.
Post-translational modifications	Ubiquitinated by ZNRF3, leading to its degradation by the proteasome.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The frizzled gene, originally identified in Drosophila melanogaster, is involved in the development of tissue polarity. The mammalian homolog of frizzled, as well as several secreted mammalian frizzled-related proteins (FRPs), have been described. The frizzled proteins contain seven transmembrane domains, a cysteine-rich domain in the extracellular region and a carboxy-terminal Ser/Thr-xxx-Val motif. They function as receptors for Wnt and are generally coupled to G proteins. The cysteine-rich domain of frizzled-8 blocks endogenous Wnts and the effects of Wnt-1 and Wnt-5 on proliferation. The mouse frizzled-8 gene, which encodes a Wnt receptor, is a potent cancer-associated activator of the Beta-catenin-TCF pathway. The frizzled-8 gene contains no introns. Frizzled-8 mRNA has been detected in fetal brain and kidney, and also in adult pancreas, skeletal muscle, kidney and heart. Frizzled is highly expressed in HeLa S3 (cervical uterus cancer) cells and A549 lung cancer cells.

Additional Information

Gene ID	8325
Other Names	Frizzled-8, Fz-8, hFz8, FZD8

Target/Specificity	Most abundant in fetal kidney, followed by brain and lung. In adult tissues, expressed in kidney, heart, pancreas and skeletal muscle.
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

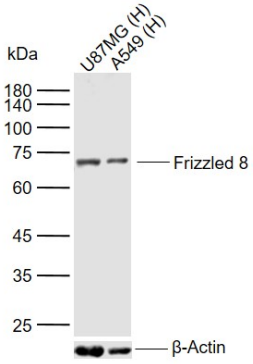
Name	FZD8
Function	Receptor for Wnt proteins. Component of the Wnt-Fzd-LRP5-LRP6 complex that triggers beta-catenin signaling through inducing aggregation of receptor-ligand complexes into ribosome-sized signalosomes. The beta-catenin canonical signaling pathway leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin and activation of Wnt target genes. 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. Coreceptor along with RYK of Wnt proteins, such as WNT1.
Cellular Location	Membrane; Multi-pass membrane protein. Golgi apparatus. Cell membrane; Multi-pass membrane protein. Note=Colocalizes with GOPC at the Golgi apparatus.
Tissue Location	Most abundant in fetal kidney, followed by brain and lung. In adult tissues, expressed in kidney, heart, pancreas and skeletal muscle

Background

The frizzled gene, originally identified in Drosophila melanogaster, is involved in the development of tissue polarity. The mammalian homolog of frizzled, as well as several secreted mammalian frizzled-related proteins (FRPs), have been described. The frizzled proteins contain seven transmembrane domains, a cysteine-rich domain in the extracellular region and a carboxy-terminal Ser/Thr-xxx-Val motif. They function as receptors for Wnt and are generally coupled to G proteins. The cysteine-rich domain of frizzled-8 blocks endogenous Wnts and the effects of Wnt-1 and Wnt-5 on proliferation. The mouse frizzled-8 gene, which encodes a Wnt receptor, is a potent cancer-associated activator of the Beta-catenin-TCF pathway. The frizzled-8 gene contains no introns. Frizzled-8 mRNA has been detected in fetal brain and kidney, and also in adult pancreas, skeletal muscle, kidney and heart. Frizzled is highly expressed in HeLa S3 (cervical uterus cancer) cells and A549 lung cancer cells.

Images

Sample:
Lane 1: Human U87MG cell lysates
Lane 2: Human A549 cell lysates
Primary: Anti-Frizzled 8 (AP55094) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution



Predicted band size: 70 kDa
Observed band size: 70 kDa