

Goat Anti-FZD8 / frizzled 8 Antibody

Peptide-affinity purified goat antibody Catalog # AF1452a

Specification

Goat Anti-FZD8 / frizzled 8 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>O9H461</u> NP_114072, 8325, 14370 (mouse) Human Mouse, Rat, Dog Goat Polyclonal 0.5 mg/ml IgG 73300

Goat Anti-FZD8 / frizzled 8 Antibody - Additional Information

Gene ID 8325

Other Names Frizzled-8, Fz-8, hFz8, FZD8

Dilution WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat Anti-FZD8 / frizzled 8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-FZD8 / frizzled 8 Antibody - 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

Goat Anti-FZD8 / frizzled 8 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-FZD8 / frizzled 8 Antibody - Images



AF1452a (1 μ g/ml) staining of human pancreas lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1452a (3 μ g/ml) staining of paraffin embedded Human Pancreas. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-

Goat Anti-FZD8 / frizzled 8 Antibody - Background

This intronless gene is a member of the frizzled gene family. Members of this family encode seven-transmembrane domain proteins that are receptors for the Wingless type MMTV integration site family of signaling proteins. Most frizzled receptors are coupled to the beta-catenin canonical signaling pathway. This gene is highly expressed in two human cancer cell lines, indicating that it may play a role in several types of cancer. The crystal structure of the extracellular cysteine-rich domain of a similar mouse protein has been determined.

Goat Anti-FZD8 / frizzled 8 Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.

Reconstitution of a frizzled8.Wnt3a.LRP6 signaling complex reveals multiple Wnt and Dkk1 binding sites on LRP6. Bourhis E, et al. J Biol Chem, 2010 Mar 19. PMID 20093360.

Molecular model of the Wnt protein binding site on the surface of dimeric CRD domain of the hFzd8 receptor. Voronkov AE, et al. Dokl Biochem Biophys, 2008 Mar-Apr. PMID 18505162.

A genome-wide association study identifies protein quantitative trait loci (pQTLs). Melzer D, et al. PLoS Genet, 2008 May 9. PMID 18464913.

The postsynaptic density 95/disc-large/zona occludens protein syntenin directly interacts with frizzled 7 and supports noncanonical Wnt signaling. Luyten A, et al. Mol Biol Cell, 2008 Apr. PMID 18256285.