

## Goat Anti-FZD4 Antibody (internal region)

Purified Goat Polyclonal Antibody Catalog # AF4171a

# **Specification**

## Goat Anti-FZD4 Antibody (internal region) - Product Information

Application IHC-P
Primary Accession O9ULV1
Other Accession NP\_036325.2
Reactivity Human

Predicted Human, Mouse, Rat

Host Goat Clonality Polyclonal

Concentration 0.5
Calculated MW 59881

# Goat Anti-FZD4 Antibody (internal region) - Additional Information

#### **Gene ID 8322**

## **Other Names**

FZD4; frizzled homolog 4 (Drosophila); CD344; EVR1; FEVR; FZD4S; Fz-4; FzE4; GPCR; MGC34390; WNT receptor frizzled-4; exudative vitreoretinopathy 1 (autosomal dominant; Criswick-Schepens syndrome); frizzled 4

### **Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

### **Immunogen**

Peptide with sequence C-KIRSNLQKDGTKT, from the internal region of the protein sequence according to NP 036325.2.

### 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-FZD4 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-FZD4 Antibody (internal region) - Protein Information

## Name FZD4

### **Function**

Receptor for Wnt proteins (PubMed:<a href="http://www.uniprot.org/citations/30135577"



target="\_blank">30135577</a>). 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:<a href="http://www.uniprot.org/citations/30135577" target="\_blank">30135577</a>). 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**

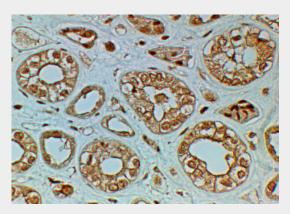
Almost ubiquitous (PubMed:10544037). Largely expressed in adult heart, skeletal muscle, ovary, and fetal kidney (PubMed:10544037). Moderate amounts in adult liver, kidney, pancreas, spleen, and fetal lung, and small amounts in placenta, adult lung, prostate, testis, colon, fetal brain and liver (PubMed:10544037)

## Goat Anti-FZD4 Antibody (internal region) - Protocols

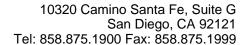
Provided below are standard protocols that you may find useful for product applications.

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

## Goat Anti-FZD4 Antibody (internal region) - Images



AF4171a (2  $\mu$ g/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.





# Goat Anti-FZD4 Antibody (internal region) - References

Inducible FGFR-1 activation leads to irreversible prostate adenocarcinoma and an epithelial-to-mesenchymal transition Acevedo VD, Gangula RD, Freeman KW, Li R, Zhang Y, Wang F, Ayala GE, Peterson LE, Ittmann M, Spencer DM Cancer Cell. 2007 Dec;12(6):559-71