

### FZD7 / Frizzled 7 Antibody (N-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS10790

### **Specification**

### FZD7 / Frizzled 7 Antibody (N-Terminus) - Product Information

Application IHC
Primary Accession 075084

Reactivity Human, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 64kDa KDa

### FZD7 / Frizzled 7 Antibody (N-Terminus) - Additional Information

**Gene ID 8324** 

**Other Names** 

Frizzled-7, Fz-7, hFz7, FzE3, FZD7

### Target/Specificity

Human FZD7 / Frizzled 7. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage** 

Long term: -70°C; Short term: +4°C

#### **Precautions**

FZD7 / Frizzled 7 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

### FZD7 / Frizzled 7 Antibody (N-Terminus) - Protein Information

## Name FZD7

#### **Function**

Receptor for Wnt proteins. Most frizzled receptors are coupled to the beta-catenin canonical signaling pathway, which 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. Activation by WNT8 induces expression of beta-catenin target genes (By similarity). Following ligand activation, binds to CCDC88C/DAPLE which displaces DVL1 from FZD7 and leads to inhibition of canonical Wnt signaling, activation of G-proteins by CCDC88C and triggering of non-canonical Wnt responses (PubMed:<a

href="http://www.uniprot.org/citations/26126266" target="\_blank">26126266</a>). 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. Endosome membrane; Multi-pass membrane protein. Note=Associated to the plasma membrane in the presence of FZD7 and phosphatidylinositol 4,5-bisphosphate (PIP2). Localized in recycling endosomes in other conditions

#### **Tissue Location**

High expression in adult skeletal muscle and fetal kidney, followed by fetal lung, adult heart, brain, and placenta Specifically expressed in squamous cell esophageal carcinomas

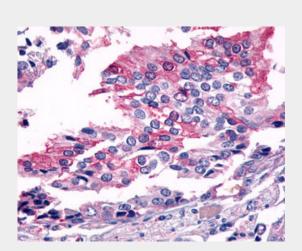
**Volume** 50 μl

# FZD7 / Frizzled 7 Antibody (N-Terminus) - Protocols

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

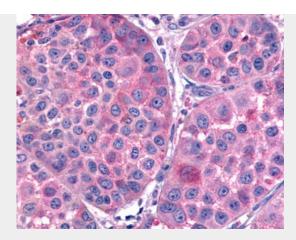
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### FZD7 / Frizzled 7 Antibody (N-Terminus) - Images

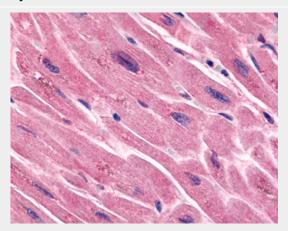


Anti-FZD7 / Frizzled 7 antibody IHC of human Prostate, Carcinoma.





Anti-FZD7 / Frizzled 7 antibody IHC of human Skin, Melanoma.



Anti-FZD7 / Frizzled 7 antibody ALS10790 IHC of human heart, cardiac myocytes.

### FZD7 / Frizzled 7 Antibody (N-Terminus) - Background

Receptor for Wnt proteins. Most of frizzled receptors are coupled to the beta-catenin canonical signaling pathway, which 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.

# FZD7 / Frizzled 7 Antibody (N-Terminus) - References

Tanaka S.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:10164-10169(1998). Hillier L.W.,et al.Nature 434:724-731(2005). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Sagara N.,et al.Biochem. Biophys. Res. Commun. 252:117-122(1998). Kwon H.S.,et al.Mol. Cell. Biol. 29:2139-2154(2009).