

FZD7 / Frizzled 7 Antibody (N-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS10789

Specification

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

Application IHC-P Primary Accession 075084

Reactivity Human, Mouse, Rabbit, Hamster, Monkey,

Pig, Bovine, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 64kDa KDa
Dilution IHC-P~~N/A

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, except FZD1 (60%), FZD2 (60%).

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). 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

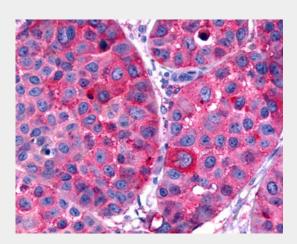
Volume 50 µl

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

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

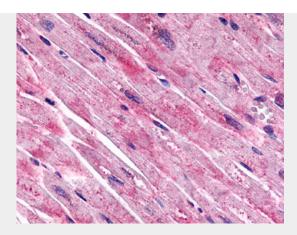
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

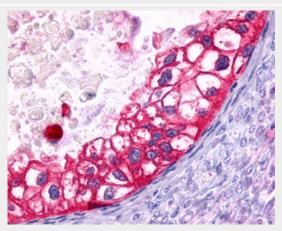


Anti-FZD7 / Frizzled 7 antibody IHC of human Skin, Melanoma.

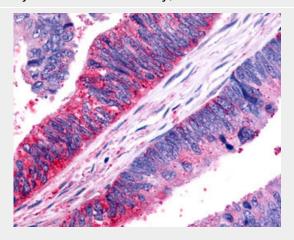




Anti-FZD7 / Frizzled 7 antibody ALS10789 IHC of human heart, cardiac myocytes.

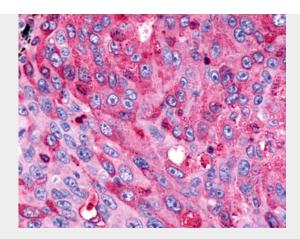


Anti-FZD7 / Frizzled 7 antibody IHC of human Ovary, Carcinoma.



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





Anti-FZD7 / Frizzled 7 antibody IHC of human Lung, Non-Small Cell Carcinoma.

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).