

FZD4 / Frizzled 4 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS10776**Specification**

FZD4 / Frizzled 4 Antibody (N-Terminus) - Product Information

Application	IHC
Primary Accession	O9ULV1
Reactivity	Human, Hamster, Monkey, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60kDa KDa

FZD4 / Frizzled 4 Antibody (N-Terminus) - Additional Information**Gene ID** 8322**Other Names**

Frizzled-4, Fz-4, hFz4, FzE4, CD344, FZD4

Target/Specificity

Human FZD4 / Frizzled 4. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

FZD4 / Frizzled 4 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

FZD4 / Frizzled 4 Antibody (N-Terminus) - Protein Information**Name** FZD4**Function**

Receptor for Wnt proteins (PubMed: <http://www.uniprot.org/citations/30135577> target="_blank">30135577). 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: <http://www.uniprot.org/citations/30135577> target="_blank">30135577). 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)

Volume

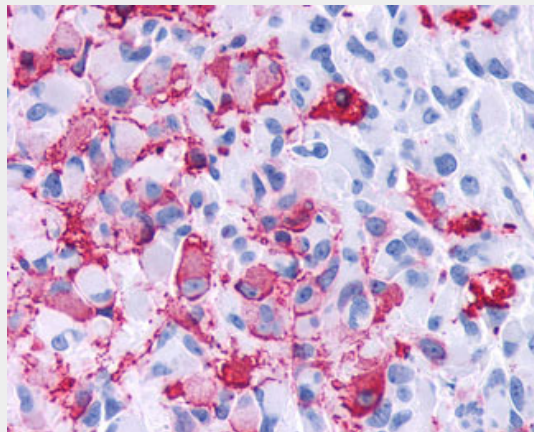
50 µl

FZD4 / Frizzled 4 Antibody (N-Terminus) - Protocols

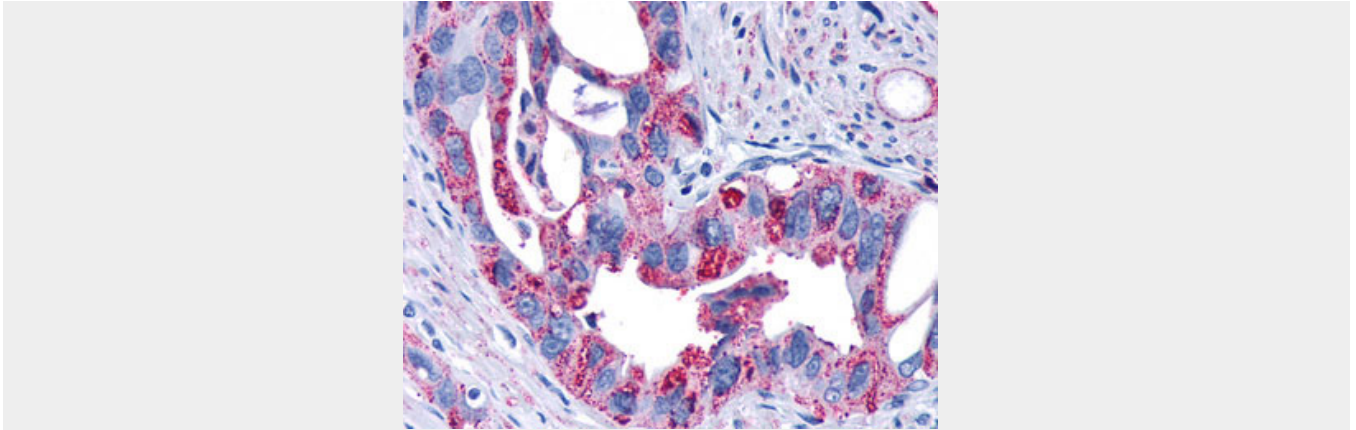
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FZD4 / Frizzled 4 Antibody (N-Terminus) - Images



Anti-FZD4 / Frizzled 4 antibody IHC of human Brain, Glioblastoma.



Anti-FZD4 / Frizzled 4 antibody IHC of human Pancreas, Carcinoma.

FZD4 / Frizzled 4 Antibody (N-Terminus) - Background

Receptor for Wnt proteins. Most of 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. Plays a critical role in retinal vascularization by acting as a receptor for Wnt proteins and norrin (NDP). In retina, it can be both activated by Wnt protein-binding, but also by a Wnt-independent signaling via binding of norrin (NDP), promoting in both cases beta-catenin (CTNNB1) accumulation and stimulation of LEF/TCF-mediated transcriptional programs. 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.

FZD4 / Frizzled 4 Antibody (N-Terminus) - References

- Kirikoshi H., et al. *Biochem. Biophys. Res. Commun.* 264:955-961(1999).
- Kopatz S.A., et al. Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases.
- Ota T., et al. *Nat. Genet.* 36:40-45(2004).
- Taylor T.D., et al. *Nature* 440:497-500(2006).
- Tanaka S., et al. *Proc. Natl. Acad. Sci. U.S.A.* 95:10164-10169(1998).