

FZD5 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1760a

Specification

FZD5 Antibody - Product Information

Application E, WB, FC
Primary Accession Q13467
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 64.5kDa KDa

Description

Members of the 'frizzled' gene family encode 7-transmembrane domain proteins that are receptors for Wnt signaling proteins. The FZD5 protein is believed to be the receptor for the Wnt5A ligand.

Immunogen

Purified recombinant fragment of human FZD5 (AA:151-217) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

FZD5 Antibody - Additional Information

Gene ID 7855

Other Names

Frizzled-5, Fz-5, hFz5, FzE5, FZD5, C2orf31

Dilution

E~~1/10000 WB~~1/500 - 1/2000 FC~~1/200 - 1/400

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

FZD5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FZD5 Antibody - Protein Information

Name FZD5

Synonyms C2orf31



Function

Receptor for Wnt proteins (PubMed: 9054360, PubMed:10097073, PubMed:20530549). Can activate WNT2, WNT10B, WNT5A, but not WNT2B or WNT4 (in vitro); the in vivo situation may be different since not all of these are known to be coexpressed (By similarity). In neurons, activation of WNT7A promotes formation of synapses (PubMed:20530549). Functions in the canonical Wnt/beta-catenin signaling pathway. The canonical Wnt/beta-catenin 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 (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 (Probable). Plays a role in yolk sac angiogenesis and in placental vascularization (By similarity).

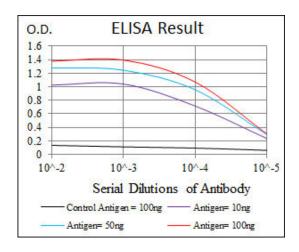
Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8CHL0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8CHL0}. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9EQD0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9EQD0}. Synapse {ECO:0000250|UniProtKB:Q8CHL0}. Perikaryon {ECO:0000250|UniProtKB:Q8CHL0}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8CHL0}. Cell projection, axon {ECO:0000250|UniProtKB:Q8CHL0}. Note=Localized at the plasma membrane and also found at the Golgi. {ECO:0000250|UniProtKB:Q9EQD0}

FZD5 Antibody - 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





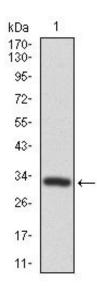


Figure 1: Western blot analysis using FZD5 mAb against human FZD5 recombinant protein. (Expected MW is 32.5 kDa)

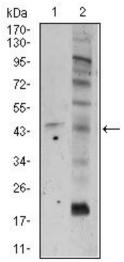


Figure 2: Western blot analysis using FZD5 mouse mAb against A549 (1), and PC-3 (2) cell lysate.

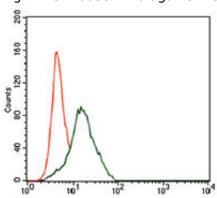


Figure 3: Flow cytometric analysis of HepG2 cells using FZD5 mouse mAb (green) and negative control (red).

FZD5 Antibody - References

1.J Biol Chem. 2009 Sep 25;284(39):26716-24.2.Int J Oncol. 2007 Mar;30(3):751-5.