

Frizzled-7 Polyclonal Antibody

Catalog # AP69969

Product Information

Application WB, FC, IF, ICC, E

Primary Accession <u>075084</u>

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW63620

Additional Information

Gene ID 8324

Other Names FZD7; Frizzled-7; Fz-7; hFz7; FzE3

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000.

ELISA: 1/20000. Not yet tested in other applications. FC~~1:10~50

IF~~1:50~200 ICC~~N/A E~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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: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

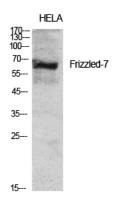
Tissue Location

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

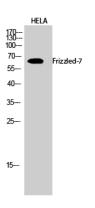
Background

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.

Images



Western Blot analysis of various cells using Frizzled-7 Polyclonal Antibody diluted at 1: 2000



Western Blot analysis of HELA cells using Frizzled-7 Polyclonal Antibody diluted at 1: 2000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.