

FZD7 Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP18021c

# Specification

# FZD7 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>075084</u>

# FZD7 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 8324

**Other Names** Frizzled-7, Fz-7, hFz7, FzE3, FZD7

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### FZD7 Antibody (Center) Blocking Peptide - 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

# FZD7 Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

# FZD7 Antibody (Center) Blocking Peptide - Images

# FZD7 Antibody (Center) Blocking Peptide - Background

Members of the 'frizzled' gene family encode7-transmembrane domain proteins that are receptors for Whtsignaling proteins. The FZD7 protein contains an N-terminal signalsequence, 10 cysteine residues typical of the cysteine-richextracellular domain of Fz family members, 7 putative transmembranedomains, and an intracellular C-terminal tail with a PDZdomain-binding motif. FZD7 gene expression may downregulate APCfunction and enhance beta-catenin-mediated signals in poorlydifferentiated human esophageal carcinomas.

# FZD7 Antibody (Center) Blocking Peptide - References

Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)Vincan, E., et al. Dev. Dyn. 239(1):311-317(2010)Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :Hosgood, H.D. III, et al. Respir Med 103(12):1866-1870(2009)Ueno, K., et al. Br. J. Cancer 101(8):1374-1381(2009)