

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

FZD7 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O75084](#)**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: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

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 encode 7-transmembrane domain proteins that are receptors for Wnt signaling proteins. The FZD7 protein contains an N-terminal signal sequence, 10 cysteine residues typical of the cysteine-rich extracellular domain of Fz family members, 7 putative transmembrane domains, and an intracellular C-terminal tail with a PDZ domain-binding motif. FZD7 gene expression may downregulate APC function and enhance beta-catenin-mediated signals in poorly differentiated 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)