

# FZD7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18021c

# **Specification**

FZD7 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>075084</u>
Other Accession	<u>Q61090, 057329,</u>
	<u>NP_003498.1</u>
Reactivity	Human
Predicted	Chicken, Mouse
Host	Rabbit

Predicted Host Clonality Isotype Antigen Region Human Chicken, Mous Rabbit Polyclonal Rabbit IgG 202-229

### FZD7 Antibody (Center) - Additional Information

Gene ID 8324

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

## Target/Specificity

This FZD7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 202-229 amino acids from the Central region of human FZD7.

Dilution WB~~1:1000

## Format

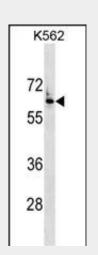
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# Precautions

FZD7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.



FZD7 Antibody (Center) (Cat. #AP18021c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the FZD7 antibody detected the FZD7 protein (arrow).

# FZD7 Antibody (Center) - 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) - 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



FZD7 Antibody (Center) - 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://ww w.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) - Protocols

Provided below are standard protocols that you

(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)



may find useful for product applications.

- Western Blot
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>