

#3795 Store at -20°C

Frizzled5 Antibody



✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Transfected	H	50-65 kDa	Rabbit**

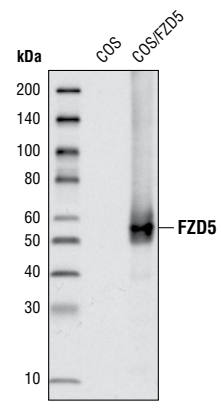
Background: Frizzled (Fzd) belongs to the seven transmembrane-spanning G-protein-coupled receptor superfamily (1). Fzds have a large extracellular N-terminal region containing a cysteine-rich domain (CRD), which is involved in binding to Wnt proteins (1,2). The intracellular C-terminus binds to the PDZ domain of Dvl proteins, a major signaling component downstream of Fzd (3). Wnt proteins bind to Fzd and the co-receptors LRP5 or LRP6, and activate Wnt/β-catenin pathway through inhibiting phosphorylation of β-catenin by GSK3β (4,5). In addition to this canonical Wnt/β-catenin pathway, some Wnt proteins can also activate the Fzd/Ca²⁺ pathway and Fzd/PCP (planar cell polarity) pathway (6,7). The mammalian Fzd subfamily has 10 members (Fzd1 to Fzd10) and they may mediate signaling through different pathways (8). Some Fzds can also bind to other secreted proteins, like Norrin and R-Spondin (9-11).

Specificity/Sensitivity: Frizzled5 Antibody detects transfected levels of total frizzled5 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with synthetic peptide corresponding to the amino acid sequence surrounding Ala549 of human frizzled5. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- Schulte, G. and Bryja, V. (2007) *Trends Pharmacol Sci* 28, 518-25.
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- Wong, H.C. et al. (2003) *Mol Cell* 12, 1251-60.
- Zeng, X. et al. (2005) *Nature* 438, 873-7.
- Davidson, G. et al. (2005) *Nature* 438, 867-72.
- Fanto, M. and McNeill, H. (2004) *J Cell Sci* 117, 527-33.
- Kohn, A.D. and Moon, R.T. *Cell Calcium* 38, 439-46.
- Cadigan, K.M. and Liu, Y.I. (2006) *J Cell Sci* 119, 395-402.
- Xu, Q. et al. (2004) *Cell* 116, 883-95.
- Nam, J.S. et al. (2006) *J Biol Chem* 281, 13247-57.
- Hendrickx, M. and Leyns, L. (2008) *Dev Growth Differ* 50, 229-43.



Western blot analysis of extracts from COS cells, mock transfected or transfected with human Frizzled5, using Frizzled5 Antibody.

Entrez-Gene ID #7855
Swiss-Prot Acc. #Q13467

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting	1:1000
Immunoprecipitation	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.