

frizzled-6 (C-20): sc-32150

BACKGROUND

Frizzled-6 (FZD6, also known as frizzled homolog 6 in *Drosophila*) is a seven-transmembrane domain receptor that binds the Wnt ligand and influences macroscopic hair patterning and other tissue polarity events. Frizzled-6 protein contains a signal peptide and a cysteine-rich domain (CRD) in the N-terminal extracellular region, and does not contain a C-terminal PDZ domain-binding motif. Frizzled-3 and frizzled-6 influence neural tube closure and the planar orientation of hair bundles on a subset of auditory and vestibular sensory cells. Madin-Darby canine kidney (MDCK) cells are competent to form tubules *in vitro* and express the frizzled-6 receptor, which is known to form a complex with Wnt-4 through the CRD in this cell type. Frizzled-6 is expressed as a 4.4 kb mRNA in various human tissues, including adult heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, thymus, prostate, testis, ovary, small intestine and colon.

REFERENCES

1. Tokuhara, M., et al. 1998. Molecular cloning of human Frizzled-6. *Biochem. Biophys. Res. Commun.* 243: 622-627.
2. Yanagawa, S., et al. 1998. Identification and characterization of a novel line of *Drosophila* Schneider S2 cells that respond to wingless signaling. *J. Biol. Chem.* 273: 32353-32359.
3. Golan, T., et al. 2004. The human Frizzled 6 (HFz6) acts as a negative regulator of the canonical Wnt. β -catenin signaling cascade. *J. Biol. Chem.* 279: 14879-14888.
4. Guo, N., et al. 2004. Frizzled6 controls hair patterning in mice. *Proc. Natl. Acad. Sci. USA* 101: 9277-9281.
5. Lyons, J.P., et al. 2004. Wnt-4 activates the canonical β -catenin-mediated Wnt pathway and binds Frizzled-6 CRD: functional implications of Wnt/ β -catenin activity in kidney epithelial cells. *Exp. Cell Res.* 298: 369-387.
6. Gregorieff, A., et al. 2005. Expression pattern of Wnt signaling components in the adult intestine. *Gastroenterology* 129: 626-638.

CHROMOSOMAL LOCATION

Genetic locus: FZD6 (human) mapping to 8q22.3; Fzd6 (mouse) mapping to 15 B3.1.

SOURCE

frizzled-6 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of frizzled-6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32150 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

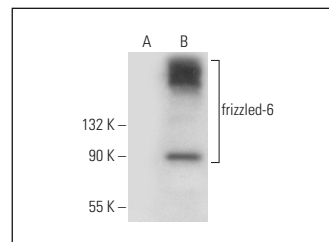
frizzled-6 (C-20) is recommended for detection of frizzled-6 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

frizzled-6 (C-20) is also recommended for detection of frizzled-6 in additional species, including equine and porcine.

Suitable for use as control antibody for frizzled-6 siRNA (h): sc-39987, frizzled-6 siRNA (m): sc-39989, frizzled-6 shRNA Plasmid (h): sc-39987-SH, frizzled-6 shRNA Plasmid (m): sc-39989-SH, frizzled-6 shRNA (h) Lentiviral Particles: sc-39987-V and frizzled-6 shRNA (m) Lentiviral Particles: sc-39989-V.

Molecular Weight of frizzled-6: 79 kDa.

DATA



frizzled-6 (C-20): sc-32150. Western blot analysis of frizzled-6 expression in non-transfected, sc-117752 (A) and mouse frizzled-6 transfected: sc-120321 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **frizzled-6 (C-12): sc-393791** or **frizzled-6 (D-2): sc-393113**, our highly recommended monoclonal alternatives to frizzled-6 (C-20).