

frizzled-3 (H-20): sc-68333

BACKGROUND

The frizzled gene, originally identified in *Drosophila melanogaster*, is involved in the development of tissue polarity. The mammalian homolog of frizzled, as well as several secreted mammalian frizzled-related proteins (FRPs) have been described. The frizzled proteins contain seven transmembrane domains, a cysteine-rich domain in the extracellular region and a carboxy terminal Ser/Thr-xxx-Val motif. They function as receptors for Wnt and are generally coupled to G proteins. The FRPs are involved in the Wnt signaling pathway by regulating the intracellular levels of β -catenin. frizzled-3 (Fz-3) is a widely expressed, 666 amino acid protein, with relatively high expression in the central nervous system. frizzled-3 has been associated with schizophrenia and has been shown to play a role in neural crest formation and hair follicle development. Two named isoforms of frizzled-3 exist as a result of alternative splicing events.

REFERENCES

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3. Tan, C., et al. 2001. Kermit, a frizzled interacting protein, regulates frizzled-3 signaling in neural crest development. *Development* 128: 3665-3674.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606143. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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6. Katsu, T., et al. 2003. The human frizzled-3 (FZD3) gene on chromosome 8p21, a receptor gene for Wnt ligands, is associated with the susceptibility to schizophrenia. *Neurosci. Lett.* 353: 53-56.
7. Jeong, S.H., et al. 2006. Investigation of genetic association between human frizzled homolog 3 gene (FZD3) and schizophrenia: results in a Korean population and evidence from meta-analysis. *Psychiatry Res.* 143: 1-11.

CHROMOSOMAL LOCATION

Genetic locus: FZD3 (human) mapping to 8p21.1; Fzd3 (mouse) mapping to 14 D1.

SOURCE

frizzled-3 (H-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of frizzled-3 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-68333 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

frizzled-3 (H-20) is recommended for detection of frizzled-3 of mouse, rat and human 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).

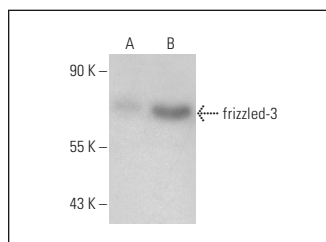
frizzled-3 (H-20) is also recommended for detection of frizzled-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for frizzled-3 siRNA (h): sc-39981, frizzled-3 siRNA (m): sc-39982, frizzled-3 shRNA Plasmid (h): sc-39981-SH, frizzled-3 shRNA Plasmid (m): sc-39982-SH, frizzled-3 shRNA (h) Lentiviral Particles: sc-39981-V and frizzled-3 shRNA (m) Lentiviral Particles: sc-39982-V.

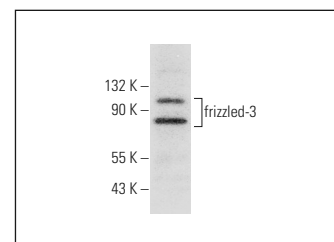
Molecular Weight of frizzled-3: 76 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or frizzled-3 (m): 293 Lysate: sc-178641.

DATA



frizzled-3 (H-20): sc-68333. Western blot analysis of frizzled-3 expression in non-transfected: sc-110760 (A) and mouse frizzled-3 transfected: sc-178641 (B) 293 whole cell lysates.



frizzled-3 (H-20): sc-68333. Western blot analysis of frizzled-3 expression in HeLa whole cell lysate.

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-3 (C-1): sc-376105**, our highly recommended monoclonal alternative to frizzled-3 (H-20).