# frizzled-3 (H-166): sc-292246



The Power to Question

## **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  $\beta$ -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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- Sala, C.F., et al. 2000. Identification, gene structure, and expression of human frizzled-3 (FZD3). Biochem. Biophys. Res. Commun. 273: 27-34.
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# **CHROMOSOMAL LOCATION**

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

## **SOURCE**

frizzled-3 (H-166) is a rabbit polyclonal antibody raised against amino acids 501-666 mapping at the C-terminus of frizzled-3 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

frizzled-3 (H-166) 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  $\mu$ g per 100-500  $\mu$ 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-166) 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.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **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.



Try **frizzled-3 (C-1): sc-376105**, our highly recommended monoclonal alternative to frizzled-3 (H-166).

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