

frizzled-9 (E-15): sc-33506

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 frizzled-9 gene is located within the Williams syndrome common deleted region at chromosomal band 7q11.23. Heterozygous deletion of the frizzled-9 gene may contribute to the Williams syndrome phenotype. In mouse, frizzled-9 overexpression can induce the hyperphosphorylation and relocalization of Dvl-1 from the cytoplasm to the cell membrane and cytosolic β -catenin accumulation. In rat, frizzled-9 is important in Wnt/ β -catenin signaling in 293T cells. Frizzled-9 is expressed predominantly in brain, testis, eye, skeletal muscle, and kidney.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FZD9 (human) mapping to 7q11.23; Fzd9 (mouse) mapping to 5 G2.

RESEARCH USE

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

SOURCE

frizzled-9 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of frizzled-9 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-33506 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

frizzled-9 (E-15) is recommended for detection of frizzled-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-9 (E-15) is also recommended for detection of frizzled-9 in additional species, including canine and bovine.

Suitable for use as control antibody for frizzled-9 siRNA (h): sc-39994, frizzled-9 siRNA (m): sc-39995, frizzled-9 shRNA Plasmid (h): sc-39994-SH, frizzled-9 shRNA Plasmid (m): sc-39995-SH, frizzled-9 shRNA (h) Lentiviral Particles: sc-39994-V and frizzled-9 shRNA (m) Lentiviral Particles: sc-39995-V.

Molecular Weight of frizzled-9: 65 kDa.

Positive Controls: F9 cell lysate: sc-2245.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

PROTOCOLS

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