

frizzled-2 (E-12): sc-68328

BACKGROUND

The frizzled gene, originally identified in *Drosophila melanogaster*, is involved in the development of tissue polarity. The frizzled proteins contain seven transmembrane domains, a cysteine-rich domain in the extracellular region and a carboxy-terminal Ser/Thr-XXX-Val motif. The proteins in this family function as receptors for Wnt and are generally coupled to G proteins. Frizzleds are members of the G protein-coupled receptor superfamily. Frizzled-2 is expressed in the fetal kidney and lung, and in the adult ovary and colon. Frizzled-2 mediates the Wnt/cGMP/Ca²⁺ pathway. It binds Wnt proteins and signals by activating the release of stored calcium. Frizzled-2 expression is regulated by Angiotensin II. Activated frizzled-2 suppresses the activity of protein kinase G, and activates NFAT-dependent transcription, the phosphatidylinositol pathway and calcium sensitive enzymes.

REFERENCES

- Zhao, Z., et al. 1995. A human homologue of the *Drosophila* polarity gene frizzled has been identified and mapped to 17q21.1. *Genomics* 27: 370-373.
- Sagara, N., et al. 1998. Molecular cloning, differential expression, and chromosomal localization of human frizzled-1, frizzled-2, and frizzled-7. *Biochem. Biophys. Res. Commun.* 252: 117-122.

CHROMOSOMAL LOCATION

Genetic locus: FZD2 (human) mapping to 17q21.31; Fzd2 (mouse) mapping to 11 E1.

SOURCE

frizzled-2 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of frizzled-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-68328 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

frizzled-2 (E-12) is recommended for detection of frizzled-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for frizzled-2 siRNA (h): sc-39979, frizzled-2 siRNA (m): sc-39980, frizzled-2 shRNA Plasmid (h): sc-39979-SH, frizzled-2 shRNA Plasmid (m): sc-39980-SH, frizzled-2 shRNA (h) Lentiviral Particles: sc-39979-V and frizzled-2 shRNA (m) Lentiviral Particles: sc-39980-V.

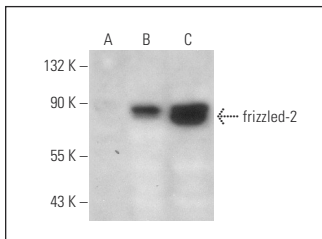
Molecular Weight of frizzled-2: 65 kDa.

Positive Controls: frizzled-2 (m): 293T Lysate: sc-125348 or MDA-MB-231 cell lysate: sc-2232.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



frizzled-2 (E-12): sc-68328. Western blot analysis of frizzled-2 expression in non-transfected 293T: sc-117752 (A), mouse frizzled-2 transfected 293T: sc-125348 (B) and MDA-MB-231 (C) 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.


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Try **frizzled-2 (K19R): sc-74019**, our highly recommended monoclonal alternative to frizzled-2 (E-12).