SANTA CRUZ BIOTECHNOLOGY, INC.

WIF-1 (C-19): sc-15668



BACKGROUND

The Wnt genes are a group of conserved, cysteine-rich, secreted glycoproteins that are required for numerous developmental processes including embryogenesis, asymmetric cell division and central nervous system (CNS) patterning. Wnt association with the transmembrane spanning receptor Frizzled, activates Dishevelled, which downregulates glycogen synthase kinase (GSK) through serine phosphorylation. Reduced levels of active GSK causes accumulation of β -catenin and subsequent regulation of developmentally significant Wnt target genes. Wnt antagonists such as Dickkopf (Dkk), Frizzled-related protein (sFRP) and Wnt inhibitory factor-1 (WIF-1), are necessary to ensure normal spatial and temporal patterns of Wnt activity during developmental processes. Wnt inhibitory factor-1 (WIF-1) is a 379-amino acid, secreted protein that contains an N-terminal signal sequence, a 150-amino acid WIF domain, 5 epidermal growth factor-like repeats, and a 45-amino acid C-terminal hydrophilic domain.

CHROMOSOMAL LOCATION

Genetic locus: WIF1 (human) mapping to 12q14.3; Wif1 (mouse) mapping to 10 D2.

SOURCE

WIF-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WIF-1 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-15668 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WIF-1 (C-19) is recommended for detection of WIF-1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WIF-1 (C-19) is also recommended for detection of WIF-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for WIF-1 siRNA (h): sc-36837, WIF-1 siRNA (m): sc-36838, WIF-1 shRNA Plasmid (h): sc-36837-SH, WIF-1 shRNA Plasmid (m): sc-36838-SH, WIF-1 shRNA (h) Lentiviral Particles: sc-36837-V and WIF-1 shRNA (m) Lentiviral Particles: sc-36838-V.

Molecular Weight (predicted) of WIF-1: 42 kDa.

Molecular Weight (observed) of WIF-1: 55-63 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, 3T3-L1 cell lysate: sc-2243 or HeLa whole cell lysate: sc-2200.

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) Immunofluo-rescence: 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



WIF-1 (C-19): sc-15668. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells

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 Satisfation Guaranteed

Try **WIF-1 (B-10): sc-373780**, our highly recommended monoclonal alternative to WIF-1 (C-19).