Wnt-2 (V-16): sc-5207



The Power to Question

BACKGROUND

Products of the highly conserved Wnt gene family, including Wnt-1 through Wnt-10, play key roles in regulating cellular growth and differentiation. Wnt-1 is a cysteine-rich, secreted glycoprotein that associates with cell membranes and likely functions as a key regulator of cellular adhesion. Wnt-1, which is essential for normal development of the embryonic nervous system, contributes to hyperplasia and tumorigenic progression when improperly expressed in mammary tissue. Wnt-3 is also involved in tumorigenesis and Wnt-2 and Wnt-4 may be associated with abnormal proliferation in human breast tissue. Wnt-1, Wnt-3 and Wnt-10b have been implicated along with FGF-3 in the development of mouse mammary tumor virus induced mouse mammary carcinomas. Wnt family members have been shown to interact with Sonic hedgehog (Shh) *in vivo* to induce myogenesis in somatic tissue.

CHROMOSOMAL LOCATION

Genetic locus: WNT2 (human) mapping to 7q31.2; Wnt2 (mouse) mapping to 6 A2.

SOURCE

Wnt-2 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Wnt-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-5207 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Wnt-2 (V-16) is recommended for detection of precursor and mature Wnt-2 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).

Wnt-2 (V-16) is also recommended for detection of precursor and mature Wnt-2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Wnt-2 siRNA (h): sc-36841, Wnt-2 siRNA (m): sc-36842, Wnt-2 shRNA Plasmid (h): sc-36841-SH, Wnt-2 shRNA Plasmid (m): sc-36842-SH, Wnt-2 shRNA (h) Lentiviral Particles: sc-36841-V and Wnt-2 shRNA (m) Lentiviral Particles: sc-36842-V.

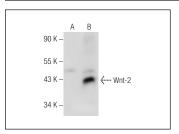
Molecular Weight of Wnt-2: 34 kDa.

Positive Controls: Wnt-2 (h3): 293T Lysate: sc-176510 or rat placenta extract: sc-364808.

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



Wnt-2 (V-16): sc-5207. Western blot analysis of Wnt-2 expression in non-transfected: sc-117752 (**A**) and human Wnt-2 transfected: sc-176510 (**B**) 293T whole rell Ivsates

SELECT PRODUCT CITATIONS

- 1. Huang, L., et al. 2006. Infrequent Cox-2 expression due to promoter hypermethylation in gastric cancers in Dalian, China. Hum. Pathol. 37: 1557-1567.
- Li, Y., et al. 2008. Frequent S100A4 expression with unique splicing pattern in gastric cancers: a hypomethylation event paralleled with E-cadherin reduction and Wnt activation. Transl. Oncol. 1: 165-176.
- 3. Liu, Z.L., et al. 2008. Immunohistochemical profiling of Wnt, NF κ B, Stat3 and Notch signaling in human epidermal tumors. J. Dermatol. Sci. 52: 133-136.

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 **Wnt-2 (E-7): sc-514382**, our highly recommended monoclonal aternative to Wnt-2 (V-16).