

Wnt-1 (A-20): sc-6266

BACKGROUND

Products of the highly conserved Wnt gene family play key roles in regulating cellular growth and differentiation. The prototype member of the Wnt gene family, Wnt-1, is a cysteine-rich secreted glycoprotein that associates with cell membranes and likely functions as a key regulator of cellular adhesion. β -catenin, a cadherin-binding cellular adhesion protein which also binds the tumor suppressor gene APC, has been identified as a downstream target of a signal transduction pathway mediated by Wnt-1. Wnt-1 is essential for normal development of the embryonic nervous system and its expression is normally limited to the embryonic neural tube and adult spermatids. When improperly expressed in mammary tissue, Wnt-1 contributes to hyperplasia and tumorigenic progression. Wnt family members have been shown to interact with Sonic hedgehog (Shh) *in vivo* to induce myogenesis in somitic tissue.

CHROMOSOMAL LOCATION

Genetic locus: WNT1 (human) mapping to 12q13.12; Wnt1 (mouse) mapping to 15 F1.

SOURCE

Wnt-1 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Wnt-1 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-6266 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-6266 AC, 500 μ g/0.25 ml agarose in 1 ml.

APPLICATIONS

Wnt-1 (A-20) is recommended for detection of Wnt-1 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-1 (A-20) is also recommended for detection of Wnt-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Wnt-1 siRNA (h): sc-36839, Wnt-1 siRNA (m): sc-36840, Wnt-1 shRNA Plasmid (h): sc-36839-SH, Wnt-1 shRNA Plasmid (m): sc-36840-SH, Wnt-1 shRNA (h) Lentiviral Particles: sc-36839-V and Wnt-1 shRNA (m) Lentiviral Particles: sc-36840-V.

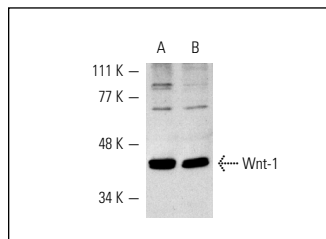
Molecular Weight of Wnt-1: 40-42 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, 3T3-L1 cell lysate: sc-2243 or WI-38 whole cell lysate.

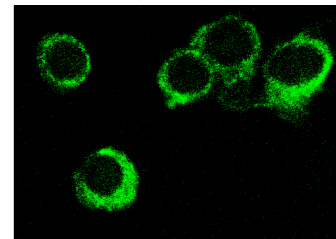
STORAGE

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

DATA



Wnt-1 (A-20): sc-6266. Western blot analysis of Wnt-1 expression in NIH/3T3 (A) and 3T3-L1 (B) whole cell lysates.



Wnt-1 (A-20): sc-6266. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Davies, G., et al. 2000. Cell-cell adhesion molecules and signaling intermediates and their role in the invasive potential of prostate cancer cells. *J. Urol.* 163: 985-992.
- Rhee, C.S., et al. 2002. Wnt and frizzled receptors as potential targets for immunotherapy in head and neck squamous cell carcinomas. *Oncogene* 21: 6598-6605.
- Daudet, N., et al. 2002. Expression of members of Wnt and frizzled gene families in the postnatal rat cochlea. *Brain Res. Mol. Brain Res.* 105: 98-107.
- Kameya, S., et al. 2002. Mfrp, a gene encoding a frizzled related protein, is mutated in the mouse retinal degeneration 6. *Hum. Mol. Genet.* 11: 1879-1886.
- Nikolova, T., et al. 2007. Wnt-conditioned media differentially affect the proliferation and differentiation of cord blood-derived CD133⁺ cells *in vitro*. *Differentiation* 75: 100-111.

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 **Wnt-1 (E-10): sc-514531**, our highly recommended monoclonal alternative to Wnt-1 (A-20).