

Wnt-1 (H-89): sc-5630

BACKGROUND

The Wnt gene family encodes secreted signaling molecules that bind to frizzled receptors and influence oncogenesis and developmental processes, including regulation of cell fate and patterning during embryogenesis. The Wnt family has two functional classes according to their biological activities—Wnts that signal through a Wnt-1/wingless pathway by stabilizing cytoplasmic β -catenin and Wnts that stimulate intracellular Ca^{2+} release and activate two kinases, CamKII and PKC, in a G protein-dependent manner. Cytoplasmic relay components transduce Wnt-induced, frizzled-mediated signals to β -catenin, which translocates to the nucleus and forms a complex with T cell factor to then activate transcription of Wnt target genes. Some of the target genes influence the promotion of tumor progression, invasion and metastasis, such as c-Myc, cyclin D1, c-Jun, Fra-1 and u-PAR. The human Wnt-1 gene clusters with Wnt-10b in the chromosome 12q13.12 region.

CHROMOSOMAL LOCATION

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

SOURCE

Wnt-1 (H-89) is a rabbit polyclonal antibody raised against amino acids 1-89 of Wnt-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.

APPLICATIONS

Wnt-1 (H-89) 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 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).

Wnt-1 (H-89) is also recommended for detection of Wnt-1 in additional species, including canine, bovine and porcine.

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: sc-364260.

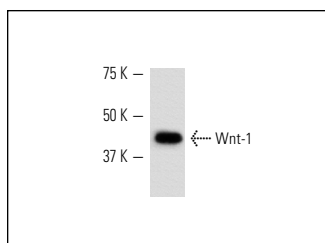
STORAGE

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.

DATA



Wnt-1 (H-89): sc-5630. Western blot analysis of Wnt-1 expression in WI-38 whole cell lysate.

SELECT PRODUCT CITATIONS

- Xu, P., et al. 2003. *In vitro* development of mouse embryonic stem cells lacking JNK/stress-activated protein kinase-associated protein 1 (JSAP1) scaffold protein revealed its requirement during early embryonic neurogenesis. *J. Biol. Chem.* 278: 48422-48433.
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- Kobayashi, M., et al. 2012. Intratumoral Wnt2B expression affects tumor proliferation and survival in malignant pleural mesothelioma patients. *Exp. Ther. Med.* 3: 952-958.
- Cases, O., et al. 2013. Cubilin, a high affinity receptor for fibroblast growth factor 8, is required for cell survival in the developing vertebrate head. *J. Biol. Chem.* 288: 16655-16670.
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Try **Wnt-1 (E-10): sc-514531**, our highly recommended monoclonal alternative to Wnt-1 (H-89).