

Wnt-2 (H-20): sc-5208

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 (H-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Wnt-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-5208 P, (100 µg 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 (H-20) is recommended for detection of Wnt-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), 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).

Wnt-2 (H-20) is also recommended for detection of Wnt-2 in additional species, including equine, canine and porcine.

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.

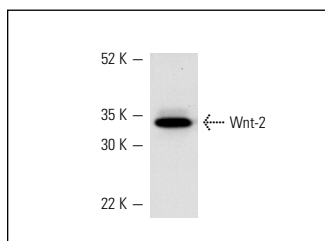
Molecular Weight of Wnt-2: 34 kDa.

Positive Controls: rat placenta tissue extract: sc-364808.

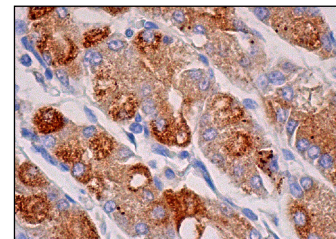
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Wnt-2 (H-20): sc-5208. Western blot analysis of Wnt-2 expression in rat placenta extract.



Wnt-2 (H-20): sc-5208. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. 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.
2. You, L., et al. 2004. Inhibition of Wnt-2-mediated signaling induces programmed cell death in non-small-cell lung cancer cells. *Oncogene* 23: 6170-6174.
3. Mazieres, J., et al. 2005. Wnt-2 as a new therapeutic target in malignant pleural mesothelioma. *Int. J. Cancer* 117: 326-332.
4. Matushansky, I., et al. 2007. Derivation of sarcomas from mesenchymal stem cells via inactivation of the Wnt pathway. *J. Clin. Invest.* 117: 3248-3257.
5. Salazar, K.D., et al. 2009. Mesenchymal stem cells produce Wnt isoforms and TGF-β1 that mediate proliferation and procollagen expression by lung fibroblasts. *Am. J. Physiol. Lung Cell Mol. Physiol.* 297: L1002-L1011.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Wnt-2 (E-7): sc-514382**, our highly recommended monoclonal alternative to Wnt-2 (H-20).