

Wnt-10b (H-70): sc-25524

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 that also binds to 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. Wnt family members have been shown to interact with Sonic hedgehog (Shh) *in vivo* to induce myogenesis in somitic tissue. Wnt-10b has been implicated along with FGF-3 in the development of mouse mammary tumor virus induced mouse mammary carcinomas.

REFERENCES

1. Nusse, R. and Varmus, H.E. 1992. Wnt genes. *Cell* 69: 1073-1087.
2. Hinck, L., et al. 1994. β -catenin: a common target for the regulation of cell adhesion by Wnt-1 and Src signaling pathways. *Trends Biochem. Sci.* 19: 538-542.

CHROMOSOMAL LOCATION

Genetic locus: WNT10B (human) mapping to 12q13.12; Wnt10b (mouse) mapping to 15 F1.

SOURCE

Wnt-10b (H-70) is a rabbit polyclonal antibody raised against amino acids 121-190 of Wnt-10b 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.

APPLICATIONS

Wnt-10b (H-70) is recommended for detection of Wnt-10b 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-10b (H-70) is also recommended for detection of Wnt-10b in additional species, including porcine.

Suitable for use as control antibody for Wnt-10b siRNA (h): sc-37185, Wnt-10b siRNA (m): sc-37186, Wnt-10b shRNA Plasmid (h): sc-37185-SH, Wnt-10b shRNA Plasmid (m): sc-37186-SH, Wnt-10b shRNA (h) Lentiviral Particles: sc-37185-V and Wnt-10b shRNA (m) Lentiviral Particles: sc-37186-V.

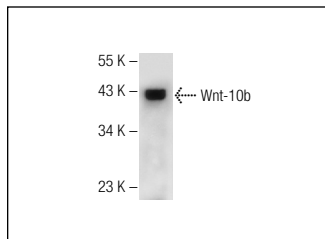
Molecular Weight of Wnt-10b: 43 kDa.

Positive Controls: rat heart extract: sc-2393.

STORAGE

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

DATA



Wnt-10b (H-70): sc-25524. Western blot analysis of Wnt-10b expression in rat heart tissue extract.

SELECT PRODUCT CITATIONS

1. Armstrong, D.D., et al. 2005. Wnt/ β -catenin signaling activates growth-control genes during overload-induced skeletal muscle hypertrophy. *Am. J. Physiol., Cell Physiol.* 289: C853-C859.
2. Chen, K., et al. 2008. Wnt-10b induces chemotaxis of osteosarcoma and correlates with reduced survival. *Pediatr. Blood Cancer* 51: 349-355.
3. Foronjy, R., et al. 2010. The divergent roles of secreted frizzled related protein-1 (SFRP1) in lung morphogenesis and emphysema. *Am. J. Pathol.* 177: 598-607.
4. Aprelikova, O., et al. 2012. Silencing of miR-148a in cancer-associated fibroblasts results in WNT10B-mediated stimulation of tumor cell motility. *Oncogene* 32: 3246-3253.
5. Beghini, A., et al. 2012. Regeneration-associated WNT signaling is activated in long-term reconstituting AC133bright acute myeloid leukemia cells. *Neoplasia* 14: 1236-1248.

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-10b (5A7F12/6C6A12): sc-517195**, our highly recommended monoclonal alternative to Wnt-10b (H-70).