

Wnt-10b (F-7): sc-518155

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., et al. 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 in signaling pathways. *Trends Biochem. Sci.* 19: 538-542.
3. Wong, G.T., et al. 1994. Differential transformation of mammary epithelial cells by Wnt genes. *Mol. Cell. Biol.* 14: 6278-6286.
4. Burrus, L.W., et al. 1995. Biochemical analysis of murine Wnt proteins reveals both shared and distinct properties. *Exp. Cell Res.* 220: 363-373.
5. Munsterberg, A.E., et al. 1995. Combinatorial signaling by Sonic hedgehog and Wnt family members induces myogenic bHLH gene expression in the somite. *Genes Dev.* 9: 2911-2922.
6. Schryver, B., et al. 1996. Properties of Wnt-1 protein that enable cell surface association. *Oncogene* 13: 333-342.
7. Papkoff, J. 1997. Regulation of complexed and free catenin pools by distinct mechanisms. *J. Biol. Chem.* 272: 4536-4543.
8. Bui, T.D., et al. 1997. A novel human Wnt gene, WNT10B, maps to 12q13 and is expressed in human breast carcinomas. *Oncogene* 14: 1249-1253.

CHROMOSOMAL LOCATION

Genetic locus: WNT10B (human) mapping to 12q13.12.

SOURCE

Wnt-10b (F-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 190-212 of Wnt-10b of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Wnt-10b (F-7) is recommended for detection of Wnt-10b of human origin by Western Blotting (starting dilution 1:100, 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).

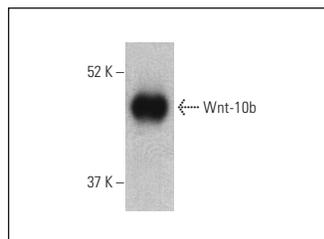
Suitable for use as control antibody for Wnt-10b siRNA (h): sc-37185, Wnt-10b shRNA Plasmid (h): sc-37185-SH and Wnt-10b shRNA (h) Lentiviral Particles: sc-37185-V.

Molecular Weight of Wnt-10b: 43 kDa.

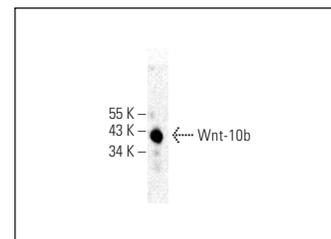
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Wnt-10b (F-7): sc-518155. Western blot analysis of human recombinant Wnt-10b. Detection reagent used: m-IgG κ BP-HRP: sc-525409.



Wnt-10b (F-7): sc-518155. Western blot analysis of human recombinant Wnt-10b protein. Detection reagent used: m-IgG κ BP-HRP: sc-516102.

RESEARCH USE

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

PROTOCOLS

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