

Wnt-2 (h3): 293T Lysate: sc-176510

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.

REFERENCES

1. Nusse, R., et al. 1992. Wnt genes. *Cell* 69: 1073-1087.
2. Wong, G.T., et al. 1994. Differential transformation of mammary epithelial cells by Wnt genes. *Mol. Cell. Biol.* 14: 6278-6286.
3. Huguet, E.L., et al. 1994. Differential expression of human Wnt genes 2, 3, 4, and 7B in human breast cell lines and normal and disease states of human breast tissue. *Cancer Res.* 54: 2615-2621.
4. 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.
5. Burrus, L.W., et al. 1995. Biochemical analysis of murine Wnt proteins reveals both shared and distinct properties. *Exp. Cell Res.* 220: 363-373.
6. Schryver, B., et al. 1996. Properties of Wnt-1 protein that enable cell surface association. *Oncogene* 13: 333-342.
7. Callahan, R. 1996. MMTV-induced mutations in mouse mammary tumors: their potential relevance to human breast cancer. *Breast Cancer Res. Treat.* 39: 33-44.

CHROMOSOMAL LOCATION

Genetic locus: WNT2 (human) mapping to 7q31.2.

PRODUCT

Wnt-2 (h3): 293T Lysate represents a lysate of human Wnt-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Wnt-2 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive Wnt-2 antibodies. Recommended use: 10-20 µl per lane.

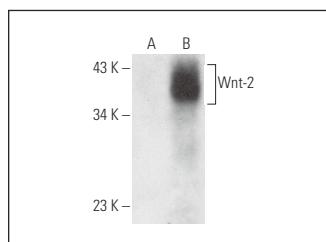
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Wnt-2 (E-7): sc-514382 is recommended as a positive control antibody for Western Blot analysis of enhanced human Wnt-2 expression in Wnt-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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.

DATA



Wnt-2 (E-7): sc-514382. Western blot analysis of Wnt-2 expression in non-transfected: sc-117752 (A) and human Wnt-2 transfected: sc-176510 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

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.