

Wnt-2 (E-7): sc-514382



The Power to Question

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.

SOURCE

Wnt-2 (E-7) is a mouse monoclonal antibody raised against amino acids 231-270 mapping near the C-terminus of Wnt-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Wnt-2 (E-7) is available conjugated to agarose (sc-514382 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514382 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514382 PE), fluorescein (sc-514382 FITC), Alexa Fluor® 488 (sc-514382 AF488), Alexa Fluor® 546 (sc-514382 AF546), Alexa Fluor® 594 (sc-514382 AF594) or Alexa Fluor® 647 (sc-514382 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514382 AF680) or Alexa Fluor® 790 (sc-514382 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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 (E-7) is recommended for detection of precursor and mature Wnt-2 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Wnt-2 siRNA (h): sc-36841, Wnt-2 shRNA Plasmid (h): sc-36841-SH and Wnt-2 shRNA (h) Lentiviral Particles: sc-36841-V.

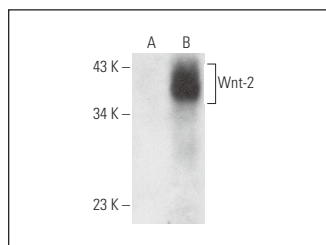
Molecular Weight of Wnt-2: 34 kDa.

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

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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-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.

SELECT PRODUCT CITATIONS

- Chen, Y., et al. 2017. Proliferation and invasion of ovarian cancer cells are suppressed by knockdown of TRIM11. *Oncol. Lett.* 14: 2125-2130.
- Liu, Z.L., et al. 2017. Inactivated Wnt signaling in resveratrol-treated epidermal squamous cancer cells and its biological implication. *Oncol. Lett.* 14: 2239-2243.
- Mondal, S., et al. 2018. Nutritional stress reprograms dedifferentiation in glioblastoma multiforme driven by PTEN/Wnt/Hedgehog axis: a stochastic model of cancer stem cells. *Cell Death Discov.* 4: 110.
- Rejani, C.T., et al. 2022. High fat-high fructose diet elicits hypogonadotropism culminating in autophagy-mediated defective differentiation of ovarian follicles. *Cells* 11: 3447.
- Wang, Y., et al. 2023. Loss of aquaporin 5 contributes to the corneal epithelial pathogenesis via Wnt/β-catenin pathway. *FASEB J.* 37: e22776.
- Bakke, D.S., et al. 2023. Myeloid vitamin D receptor regulates Paneth cells and microbial homeostasis. *FASEB J.* 37: e22957.

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.

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