SANTA CRUZ BIOTECHNOLOGY, INC.

Wnt-2 (H-40): sc-50361



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 *in vivo* to induce myogenesis in somatic tissue.

REFERENCES

- 1. Nusse, R., et al. 1992. Wnt genes. Cell 69: 1073-1087.
- Wong, G.T., et al. 1994. Differential transformation of mammary epithelial cells by Wnt genes. Mol. Cell. Biol. 14: 6278-6286.

CHROMOSOMAL LOCATION

Genetic locus: WNT2 (human) mapping to 7q31.2; Wnt2 (mouse) mapping to 6 A2.

SOURCE

Wnt-2 (H-40) is a rabbit polyclonal antibody raised against amino acids 231-270 mapping near the C-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.

APPLICATIONS

Wnt-2 (H-40) is recommended for detection of precursor and mature Wnt-2 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), immunohistochemistry (including paraffinembedded 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-40) is also recommended for detection of precursor and mature Wnt-2 in additional species, including equine, canine, bovine, porcine and avian.

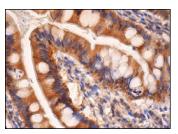
Suitable for use as control antibody for Wnt-2 siRNA (h): sc-36841, Wnt-2 siRNA (m): sc-36842, Wnt-2 shRNA Plasmid (h): sc-36841-SH, Wnt-2 shRNA Plasmid (m): sc-36842-SH, Wnt-2 shRNA (h) Lentiviral Particles: sc-36841-V and Wnt-2 shRNA (m) Lentiviral Particles: sc-36842-V.

Molecular Weight of Wnt-2: 34 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Wnt-2 (H-40): sc-50361. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

 Wang, Z., et al. 2010. Demethylation of specific Wnt/β-catenin pathway genes and its upregulation in rat brain induced by prenatal valproate exposure. Anat. Rec. 293: 1947-1953.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **Wnt-2 (E-7): sc-514382**, our highly recommended monoclonal aternative to Wnt-2 (H-40).