

Dvl-2 (H-75): sc-13974

BACKGROUND

Mammalian homologs of the *Drosophila* dishevelled (Dsh) gene have been identified, including Dvl-1, Dvl-2 and Dvl-3. The mammalian dishevelled proteins contain three homologous domains, two of which are unrelated to any other known protein. The third region is homologous to the discs-large homology domain of *Drosophila* discs-large-1, a tumor suppressor protein. Like their *Drosophila* counterpart, the dishevelled proteins are thought to be involved in embryogenesis. Overexpression of Dvl-1 has been shown to inhibit the phosphorylation of Tau by GSK-3 β . This finding may prove to be important in Alzheimer's studies, which have shown that Tau is hyperphosphorylated. In *Drosophila*, Dsh is a component of the frizzled signaling pathway. Both mammalian dishevelled and frizzled proteins are components of the Wnt signaling pathway.

CHROMOSOMAL LOCATION

Genetic locus: DVL2 (human) mapping to 17p13.1; Dvl2 (mouse) mapping to 11 B3.

SOURCE

Dvl-2 (H-75) is a rabbit polyclonal antibody raised against amino acids 623-697 of Dvl-2 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

Dvl-2 (H-75) is recommended for detection of Dvl-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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Dvl-2 siRNA (h): sc-35230, Dvl-2 siRNA (m): sc-35231, Dvl-2 shRNA Plasmid (h): sc-35230-SH, Dvl-2 shRNA Plasmid (m): sc-35231-SH, Dvl-2 shRNA (h) Lentiviral Particles: sc-35230-V and Dvl-2 shRNA (m) Lentiviral Particles: sc-35231-V.

Molecular Weight of Dvl-2: 92 kDa.

Positive Controls: Dvl-2 (h): 293 Lysate: sc-111055, BT-20 cell lysate: sc-2223 or F9 cell lysate: sc-2245.

STORAGE

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

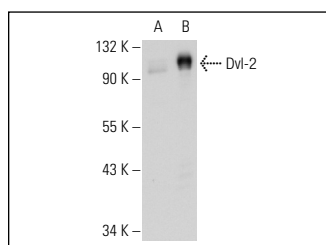
PROTOCOLS

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

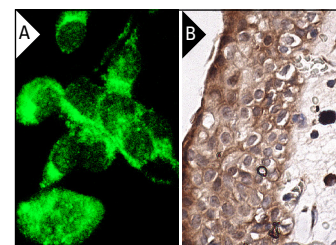
RESEARCH USE

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

DATA



Dvl-2 (H-75): sc-13974. Western blot analysis of Dvl-2 expression in non-transfected: sc-110760 (A) and human Dvl-2 transfected: sc-111055 (B) 293 whole cell lysates.



Dvl-2 (H-75): sc-13974. Immunofluorescence staining of methanol-fixed SK-N-SH cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells (B).

SELECT PRODUCT CITATIONS

- Gonzalez-Sancho, J.M., et al. 2004. Wnt proteins induce dishevelled phosphorylation via an LRP5/6-independent mechanism, irrespective of their ability to stabilize β -catenin. *Mol. Cell. Biol.* 24: 4757-4768.
- Casagolda, D., et al. 2010. A p120-catenin-CK1 ϵ complex regulates Wnt signaling. *J. Cell Sci.* 123: 2621-2631.
- Hirota, Y., et al. 2010. Planar polarity of multiciliated ependymal cells involves the anterior migration of basal bodies regulated by non-muscle myosin II. *Development* 137: 3037-3046.
- Halleskog, C., et al. 2011. WNT signaling in activated microglia is proinflammatory. *Glia* 59: 119-131.
- Anitha, P., et al. 2011. Ellagic acid coordinately attenuates Wnt/ β -catenin and NF κ B signaling pathways to induce intrinsic apoptosis in an animal model of oral oncogenesis. *Eur. J. Nutr.* 52: 75-84.
- Del Valle-Pérez, B., et al. 2011. Coordinated action of CK1 isoforms in canonical Wnt signaling. *Mol. Cell. Biol.* 31: 2877-2888.
- Cheong, J.K., et al. 2011. IC261 induces cell cycle arrest and apoptosis of human cancer cells via CK1 δ/ϵ and Wnt/ β -catenin independent inhibition of mitotic spindle formation. *Oncogene* 30: 2558-2569.
- Greer, Y.E., et al. 2011. Casein kinase 1 δ functions at the centrosome to mediate Wnt-3a-dependent neurite outgrowth. *J. Cell Biol.* 192: 993-1004.
- Vidya Priyadarsini, R., et al. 2012. Aberrant activation of Wnt/ β -catenin signaling pathway contributes to the sequential progression of DMBA-induced HBP carcinomas. *Oral Oncol.* 48: 33-39.



Try **Dvl-2 (D-6): sc-390303** or **Dvl-2 (C-2): sc-271319**, our highly recommended monoclonal alternatives to Dvl-2 (H-75). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Dvl-2 (D-6): sc-390303**.