SANTA CRUZ BIOTECHNOLOGY, INC.

Dvl (C-19): sc-7397

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-3β. 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.

REFERENCES

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2. Krasnow, R.E., et al. 1995. Dishevelled is a component of the frizzled signaling pathway in *Drosophila*. Development 121: 4095-4102.
3. Yang-Snyder, J., et al. 1996. A frizzled homolog functions in a vertebrate Wnt signaling pathway. Curr. Biol. 6: 1302-1306.

SOURCE

Dvl (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Dvl 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.

Blocking peptide available for competition studies, sc-7397 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Dvl (C-19) is recommended for detection of Dvl-1, Dvl-2 and Dvl-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Dvl (C-19) is also recommended for detection of Dvl-1, Dvl-2 and Dvl-3 in additional species, including canine, bovine and porcine.

Molecular Weight of Dvl: 85 kDa.

Positive Controls: mouse brain extract: sc-2253, BT-20 cell lysate: sc-2223 or KNRK whole cell lysate: sc-2214.

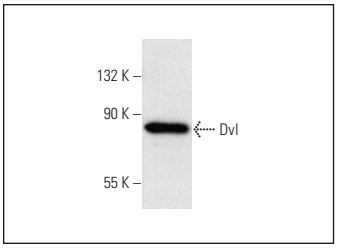
STORAGE

Store at 4° C, **DO 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.

DATA



Dvl (C-19): sc-7397. Western blot analysis of Dvl expression in mouse brain extract.

SELECT PRODUCT CITATIONS

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4. Bryja, V., et al. 2007. Wnt-3a utilizes a novel low dose and rapid pathway that does not require casein kinase 1-mediated phosphorylation of Dvl to activate β-catenin. Cell. Signal. 19: 610-616.
5. Kurzik-Dumke, U. and Czaja, J. 2007. Htid-1, the human homolog of the *Drosophila melanogaster* l2tid tumor suppressor, defines a novel physiological role of APC. Cell. Signal. 19: 1973-1985.
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