SANTA CRUZ BIOTECHNOLOGY, INC.

Dvl-3 (N-19): sc-26504

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 τ 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: DVL3 (human) mapping to 3q27.1; Dvl3 (mouse) mapping to 16 A3.

SOURCE

Dvl-3 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Dvl-3 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-26504 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

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

Suitable for use as control antibody for Dvl-3 siRNA (h): sc-40491, Dvl-3 siRNA (m): sc-40492, Dvl-3 shRNA Plasmid (h): sc-40491-SH, Dvl-3 shRNA Plasmid (m): sc-40492-SH, Dvl-3 shRNA (h) Lentiviral Particles: sc-40491-V and Dvl-3 shRNA (m) Lentiviral Particles: sc-40492-V.

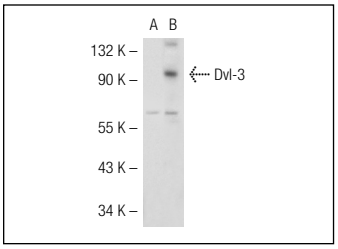
Molecular Weight of Dvl-3: 90 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, ZR-75-1 cell lysate: sc-2241 or Dvl-3 (h): 293T lysate: sc-114825.

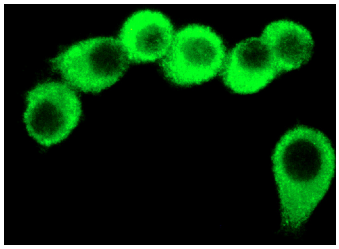
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Dvl-3 (N-19): sc-26504. Western blot analysis of Dvl-3 expression in non-transfected: sc-117752 (**A**) and human Dvl-3 transfected: sc-114825 (**B**) 293T whole cell lysates.



Dvl-3 (N-19): sc-26504. Immunofluorescence staining of methanol-fixed KNRK cells showing cytoplasmic localization.

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 Satisfaction Guaranteed

Try **Dvl-3 (G-10): sc-377289** or **Dvl-3 (4D3): sc-8027**, our highly recommended monoclonal aternatives to Dvl-3 (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Dvl-3 (G-10): sc-377289**.