**Dvl (B-4): sc-166303**

**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.

**SOURCE**

Dvl (B-4) is a mouse monoclonal antibody raised against amino acids 21-280 mapping near the N-terminus of Dvl-1 of human origin.

**PRODUCT**

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

Dvl (B-4) is available conjugated to agarose (sc-166303 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166303 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocyanin (sc-166303 PE), fluorescein (sc-166303 FITC), Alexa Fluor® 488 (sc-166303 AF488), Alexa Fluor® 546 (sc-166303 AF546), Alexa Fluor® 594 (sc-166303 AF594) or Alexa Fluor® 647 (sc-166303 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166303 AF680) or Alexa Fluor® 790 (sc-166303 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Dvl (B-4) is recommended for detection of Dvl-1, Dvl-2 and Dvl-3 of mouse, rat and 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).

Molecular Weight of Dvl: 85 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, KNKR whole cell lysate: sc-2214 or MDA-MB-231 cell lysate: sc-2232.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG Sailor HRP: 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 µl agarose/2.0 ml).

3) Immunofluorescence: use m-IgG MPB: sc-51640 or m-IgG MPB-PE: sc-516141 (dilution range 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**STORAGE**

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

**DATA**

![Western Blot Analysis of Dvl Expression](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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