

# Dvl3 Antibody

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**For Research Use Only. Not For Use In Diagnostic Procedures.**

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, M, R, Mk, Mi, Hm, B	88–93 kDa	Rabbit**

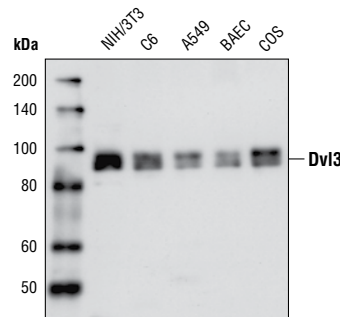
**Background:** Dishevelled (Dsh) proteins are important intermediates of Wnt signaling pathways. Dsh inhibits glycogen synthase kinase-3 $\beta$  promoting  $\beta$ -catenin stabilization. Dsh proteins also participate in the planar cell polarity pathway by acting through JNK (1,2). There are three Dsh homologs, Dvl1, Dvl2 and Dvl3 in mammals. Upon treatment with Wnt proteins, Dvls become hyperphosphorylated (3) and accumulate in the nucleus (4). Dvl proteins also associate with actin fibers and cytoplasmic vesicular membranes (5) and mediate endocytosis of the Fzd receptor after Wnt protein stimulation (6). Overexpression of Dvl has been reported in certain cancers (7,8).

**Specificity/Sensitivity:** Dvl3 Antibody detects endogenous levels of total Dvl3 protein. This antibody does not cross-react with Dvl2.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding the carboxy terminus of human Dvl3. The antibodies are purified by protein A and peptide affinity chromatography.

#### Background References:

- (1) Logan, C.Y. and Nusse, R. (2004) *Annu. Rev. Cell Dev. Biol.* 20, 781–810.
- (2) Boutros, M. and Mlodzik, M. (1999) *Mech. Dev.* 83, 27–37.
- (3) Lee, J.S. et al. (1999) *J. Biol. Chem.* 274, 21464–70.
- (4) Itoh, K. et al. (2005) *J. Biol. Chem.* 280, 31–37.
- (5) Capelluto, D.G. et al. (2002) *Nature* 419, 726–729.
- (6) Chen, W. et al. (2003) *Science* 301, 1391–1394.
- (7) Okino, K. et al. (2003) *Oncol. Rep.* 10, 1219–1223.
- (8) Uematsu, K. et al. (2003) *Oncogene* 22, 7218–7221.



Western blot analysis of extracts from NIH/3T3, C6, A549, BAEC and COS cells using Dvl3 Antibody.

Entrez-Gene ID #1857  
Swiss-Prot Acc. #Q92997

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g/ml BSA and 50% glycerol. Store at  $-20^{\circ}\text{C}$ .  
Do not aliquot the antibody.

**\*Species cross-reactivity is determined by western blot.**

**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

#### Recommended Antibody Dilutions:

Western Blotting	1:1000
Immunoprecipitation	1:200

**For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).**

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.**

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.