

#3216 Store at -20C

# Dvl2 Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R Hm Mk Mi	Endogenous	90 to 95	Rabbit	#O14641	1856

**Product Usage Information****Application**Western Blotting  
Immunoprecipitation**Dilution**1:1000  
1:200**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

Dvl2 Antibody detects endogenous levels of total Dvl2 protein. It does not cross-react with Dvl3.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser638 of human Dvl2. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

Dishevelled (Dsh) proteins are important intermediates of Wnt signaling pathways. Dsh inhibits glycogen synthase kinase-3β promoting β-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).

**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.* 4, 3.1-3.12.
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.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer****IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.**Applications Key****W:** Western Blotting **IP:** Immunoprecipitation**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey **Mi:** Mink**Trademarks and Patents**

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