

Store at  
-20°C

#48367

# DKK1 (D5V6L) Rabbit mAb

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orders@cellsignal.comEntrez-Gene ID #22943  
UniProt ID #O94907

New 03/16

**For Research Use Only. Not For Use In Diagnostic Procedures.****Applications**  
W, IP, IF-IC  
Endogenous**Species Cross-Reactivity\***  
H**Molecular Wt.**  
28-40 kDa**Isotype**  
Rabbit IgG\*\*

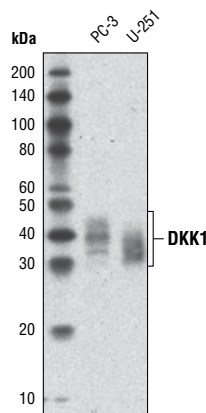
**Background:** Dickkopf (DKK) family proteins consist of four members DKK1, DKK2, DKK3 and DKK4 that function as secreted Wnt antagonists by inhibiting Wnt coreceptors LRP5 and LRP6 (1,2). DKKs contain two cysteine-rich domains in which the positions of 10 cysteine residues are well conserved (3). Their expression is both temporally and spatially regulated during animal development (4). DKKs also bind with high affinity to transmembrane proteins Kremen1 and 2, which themselves also modulate Wnt signaling (5,6). DKK1 was initially identified as an inducer of head formation in *Xenopus* embryos (7) and plays an important role in the regulation of bone mass (8-10). Research studies indicate that increased levels of DKK1 are found in the majority of lung cancers, esophageal squamous cell carcinomas, and hormone-resistant breast cancers (11,12), while DKK1 expression is decreased in malignant melanoma and colorectal cancers (13,14).

**Specificity/Sensitivity:** DKK1 (D5V6L) Rabbit mAb recognizes endogenous levels of total DKK1 protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human DKK1 protein.

**Background References:**

- (1) Mao, B. et al. (2001) *Nature* 411, 321-5.
- (2) Niehrs, C. (2006) *Oncogene* 25, 7469-81.
- (3) Krupnik, V.E. et al. (1999) *Gene* 238, 301-13.
- (4) Monaghan, A.P. et al. (1999) *Mech Dev* 87, 45-56.
- (5) Mao, B. et al. (2002) *Nature* 417, 664-7.
- (6) Davidson, G. et al. (2002) *Development* 129, 5587-96.
- (7) Glinka, A. et al. (1998) *Nature* 391, 357-62.
- (8) Baron, R. and Rawadi, G. (2007) *Curr Osteoporos Rep* 5, 73-80.
- (9) MacDonald, B.T. et al. (2007) *Bone* 41, 331-9.
- (10) Diarra, D. et al. (2007) *Nat Med* 13, 156-63.
- (11) Forget, M.A. et al. (2007) *Br J Cancer* 96, 646-53.
- (12) Yamabuki, T. et al. (2007) *Cancer Res* 67, 2517-25.
- (13) Kuphal, S. et al. (2006) *Oncogene* 25, 5027-36.
- (14) Aguilera, O. et al. (2006) *Oncogene* 25, 4116-21.



Western blot analysis of extracts of PC-3 and U-251 cells using DKK1 (D5V6L) Rabbit mAb.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

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

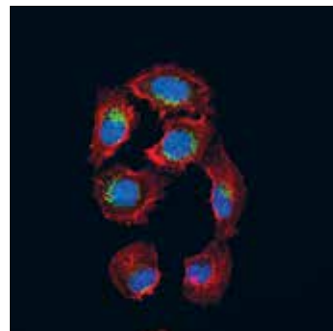
\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

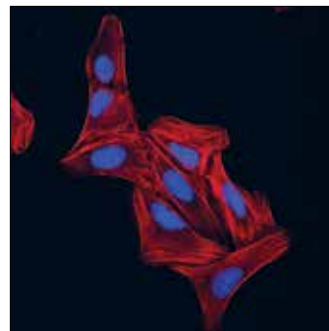
Western blotting	1:1000
Immunoprecipitation	1:100
Immunofluorescence (IF-IC)	1:800

For product specific protocols and a complete listing of recommended companion products please see the product web page at [www.cellsignal.com](http://www.cellsignal.com)

PC-3



U-2 OS



Confocal immunofluorescent analysis of PC-3 (positive, left) and U-2 OS (negative, right) cells using DKK1 (D5V6L) Rabbit mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

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**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.**

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: 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.