

#48367 Store at -20C

**DKK1 (D5V6L) Rabbit mAb****Cell Signaling**  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC	H	Endogenous	28-40	Rabbit IgG	#O94907	22943

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:100  
1:800

**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.

**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**

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).

**Background References**

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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.
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12. Yamabuki, T. et al. (2007) *Cancer Res* 67, 2517-25.
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14. Aguilera, O. et al. (2006) *Oncogene* 25, 4116-21.

**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**

**WB:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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