

DKK1 (D5V6L) Rabbit mAb

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

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

Cross-Reactivity Key

H: Human

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