

Axin2 (D48G4) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	95, 98	Rabbit IgG	#Q9Y2T1	8313

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, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Axin2 (D48G4) Rabbit mAb detects endogenous levels of total Axin2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro566 of human Axin2 protein.

Background

Axin1 (Axis inhibition protein 1) and Axin2 are multidomain scaffold proteins that negatively regulate Wnt signaling. Axin1 interacts with APC, GSK-3β, Dvl, and β-catenin and promotes the GSK-3β-mediated phosphorylation and subsequent degradation of β-catenin (1,2). Upon stimulation of cells with Wnt, Axin1 is recruited to the membrane by phosphorylated LRP5/6, a process that is believed to be crucial for activation of Wnt signaling (3,4). In addition to its role in the Wnt signaling pathway, Axin1 forms a complex with MEK1 and activates c-Jun amino-terminal kinase (JNK/SAPK) (5). Axin2 (also known as Conductin or Axil) can functionally substitute for Axin1 in mice (6). Axin2 itself is a direct target of the Wnt signaling pathway and therefore serves to control the duration and/or intensity of Wnt signaling through a negative feedback loop (7-9).

Background References

1. Luo, W. and Lin, S.C. *Neurosignals* 13, 99-113.
2. Salahshor, S. and Woodgett, J.R. (2005) *J. Clin. Pathol.* 58, 225-236.
3. Zeng, X. et al. (2005) *Nature* 438, 873-877.
4. Davidson, G. et al. (2005) *Nature* 438, 867-872.
5. Zhang, Y. et al. (1999) *J. Biol. Chem.* 274, 35247-35254.
6. Chia, I.V. and Costantini, F. (2005) *Mol. Cell Biol.* 25, 4371-4376.
7. Jho, E.H. et al. (2002) *Mol. Cell Biol.* 22, 1172-1183.
8. Lustig, B. et al. (2002) *Mol. Cell Biol.* 22, 1184-1193.
9. Leung, J.Y. et al. (2002) *J. Biol. Chem.* 277, 21657-21665.

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 nonfat dry milk, 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

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