

UNC5B (D9M7Z) Rabbit mAb

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Applications: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 130	Source/Isotype: Rabbit IgG	UniProt ID: #Q8IZJ1	Entrez-Gene Id: 219699
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

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

UNC5B (D9M7Z) Rabbit mAb recognizes endogenous levels of total UNC5B protein.

Species predicted to react based on 100% sequence homology

Xenopus

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly420 of human UNC5B protein.

Background

Netrin proteins belong to an evolutionarily conserved family of laminin-like molecules that are involved in axon guidance and vascular development. These secreted proteins can have opposing functions depending on specific receptor association. For example, deleted in colorectal cancer (DCC) family receptors typically mediate cellular attraction (1,2) while netrin bound to UNC5 family receptors induce cellular repulsion (2-4). The uncoordinated 5B homolog (UNC5B) is a transmembrane protein with extracellular Ig-like domains and an intracellular region containing a protein-binding death domain and a putative DCC interaction domain (2). Homodimers composed of DCC receptor proteins mediate axonal attraction responses, while UNC5B homodimers and UNC5B-DCC heterodimers promote cellular repulsion (2). The netrin receptor UNC5B mediates apoptosis in the absence of netrin through the activation of DAP kinase (5) and is involved in leukocyte migration inhibition (6). Expression of UNC5B correlates with bladder cancer stage and the receptor is a potential predictor of both bladder and colorectal cancer prognosis and possible disease recurrence (7,8).

Background References

- Keino-Masu, K. et al. (1996) *Cell* 87, 175-85.
- Hong, K. et al. (1999) *Cell* 97, 927-41.
- Leung-Hagsteyn, C. et al. (1992) *Cell* 71, 289-99.
- Lu, X. et al. (2004) *Nature* 432, 179-86.
- Guenebeaud, C. et al. (2010) *Mol Cell* 40, 863-76.
- Ly, N.P. et al. (2005) *Proc Natl Acad Sci U S A* 102, 14729-34.
- Liu, J. et al. (2013) *Tumour Biol* 34, 2099-108.
- Okazaki, S. et al. (2012) *Int J Oncol* 40, 209-16.

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

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