

MICAL1 (D8K7R) Rabbit mAb

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Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 130	Source/Isotype: Rabbit IgG	UniProt ID: #Q8TDZ2	Entrez-Gene Id: 64780
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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

MICAL1 (D8K7R) Rabbit mAb recognizes endogenous levels of total MICAL1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val1038 of human MICAL1 protein.

Background

Molecule interacting with CasL protein 1 (MICAL1) is a Protein-methionine sulfoxide oxidase. MICAL1 can bind directly to F-actin and oxidize specific methionine residues to promote actin filament disassembly (1-3). MICAL1 is an important component of semaphorin signaling cascades that has effects on cell movement, angiogenesis, immunology, diabetes, and cancer (2,4-6). MICAL1 binds to NDR1/2 and antagonizes MST1-induced NDR activation and apoptosis (7).

Background References

1. Hung, R.J. et al. (2013) *Nat Cell Biol* 15, 1445-54.
2. Lee, B.C. et al. (2013) *Mol Cell* 51, 397-404.
3. Giridharan, S.S. and Caplan, S. (2014) *Antioxid Redox Signal* 20, 2059-73.
4. Terman, J.R. et al. (2002) *Cell* 109, 887-900.
5. Aggarwal, P.K. et al. (2015) *Diabetes* 64, 1743-59.
6. Loria, R. et al. (2015) *Oncotarget* 6, 2779-93.
7. Zhou, Y. et al. (2011) *Mol Cell Biol* 31, 3603-15.

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

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