

#41112 Store at -20C

MICAL1 (D8K7R) Rabbit mAb**Cell Signaling**
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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	130	Rabbit IgG	#Q8TDZ2	64780

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

- Hung, R.J. et al. (2013) *Nat Cell Biol* 15, 1445-54.
- Lee, B.C. et al. (2013) *Mol Cell* 51, 397-404.
- Giridharan, S.S. and Caplan, S. (2014) *Antioxid Redox Signal* 20, 2059-73.
- Terman, J.R. et al. (2002) *Cell* 109, 887-900.
- Aggarwal, P.K. et al. (2015) *Diabetes* 64, 1743-59.
- Loria, R. et al. (2015) *Oncotarget* 6, 2779-93.
- 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**WB:** Western Blotting **IP:** Immunoprecipitation**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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