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MICAL2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9597a

Product Information

Application	WB, E
Primary Accession	O94851
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18640
Calculated MW	219061
Antigen Region	55-83

Additional Information

Gene ID	9645
Other Names	Protein-methionine sulfoxide oxidase MICAL2, 11413-, Molecule interacting with CasL protein 2, MICAL-2, MICAL2, KIAA0750, MICAL2PV1, MICAL2PV2
Target/Specificity	This MICAL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-83 amino acids from the N-terminal region of human MICAL2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MICAL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MICAL2 (HGNC:24693)
Function	Methionine monooxygenase that promotes depolymerization of F- actin by mediating oxidation of residues 'Met-44' and 'Met-47' on actin to form methionine-sulfoxide, resulting in actin filament disassembly and preventing

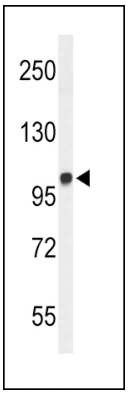
repolymerization (PubMed:24440334, PubMed:29343822). Regulates the disassembly of branched actin networks also by oxidizing ARP3B-containing ARP2/3 complexes leading to ARP3B dissociation from the network (PubMed:34106209). Acts as a key regulator of the SRF signaling pathway elicited by nerve growth factor and serum: mediates oxidation and subsequent depolymerization of nuclear actin, leading to increase MKL1/MRTF-A presence in the nucleus and promote SRF:MKL1/MRTF-A-dependent gene transcription. Does not activate SRF:MKL1/MRTF-A through RhoA (PubMed:24440334).

Cellular Location Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q8BML1}

References

Ashida, S., et al. Clin. Cancer Res. 12(9):2767-2773(2006)
Fischer, J., et al. Biochem. Biophys. Res. Commun. 328(2):415-423(2005)

Images



Western blot analysis of MICAL2 Antibody (N-term) (Cat. #AP9597a) in WiDr cell line lysates (35ug/lane). MICAL2 (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.