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MICA1 Rabbit Polyclonal Antibody

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Catalog # AP93536

Product Information

Application	WB, IHC-P
Primary Accession	Q8TDZ2
Reactivity	Human, Mouse, Rat
Host	Polyclonal, Rabbit,IgG
Clonality	Polyclonal
Calculated MW	117875

Additional Information

Gene ID	64780
Other Names	[F-actin]-monooxygenase MICAL1, 1.14.13.225, 1.6.3.1, Molecule interacting with CasL protein 1, MICAL-1, NEDD9-interacting protein with calponin homology and LIM domains, MICAL1, MICAL, NICAL
Dilution	WB~~1:1000 IHC-P~~N/A
Storage Conditions	-20℃

Protein Information

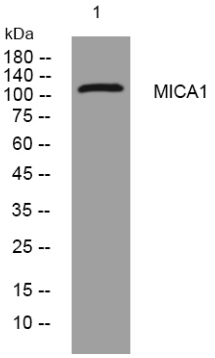
Name	MICAL1
Synonyms	MICAL, NICAL
Function	Monooxygenase that promotes depolymerization of F-actin by mediating oxidation of specific methionine residues on actin to form methionine-sulfoxide, resulting in actin filament disassembly and preventing repolymerization (PubMed:29343822). In the absence of actin, it also functions as a NADPH oxidase producing H(2)O(2) (PubMed:21864500, PubMed:26845023, PubMed:29343822). Acts as a cytoskeletal regulator that connects NEDD9 to intermediate filaments. Also acts as a negative regulator of apoptosis via its interaction with STK38 and STK38L; acts by antagonizing STK38 and STK38L activation by MST1/STK4. Involved in regulation of lamina-specific connectivity in the nervous system such as the development of lamina-restricted hippocampal connections. Through redox regulation of the actin cytoskeleton controls the intracellular distribution of secretory vesicles containing L1/neurofascin/NgCAM family proteins in neurons, thereby regulating their cell surface levels (By similarity). May act as Rab effector protein and play a role in vesicle trafficking. Promotes endosomal tubule extension by associating with RAB8 (RAB8A or RAB8B), RAB10 and GRAF (GRAF1/ARHGAP26 or GRAF2/ARHGAP10) on the endosomal membrane

	which may connect GRAFs to Rabs, thereby participating in neosynthesized Rab8-Rab10-Rab11-dependent protein export (PubMed:32344433).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton. Endosome membrane. Midbody Note=Accumulates transiently at the abscission site before abscission occurs. Colocalized with GRAF1/ARHGAP26 and GRAF2/ARHGAP10, RAB8A, RAB8B and RAB10 on endosomal tubules (PubMed:32344433)
Tissue Location	Expressed in the thymus, lung, spleen, kidney, testis and hematopoietic cells.

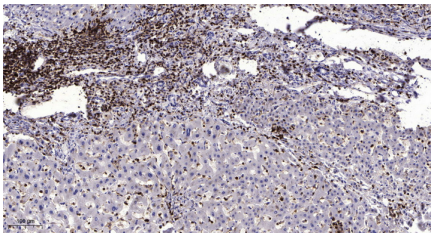
Background

This gene encodes an enzyme that oxidizes methionine residues on actin, thereby promoting depolymerization of actin filaments. This protein interacts with and regulates signalling by NEDD9/CAS-L (neural precursor cell expressed, developmentally down-regulated 9). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015],

Images



Western blot analysis of lysates from Hela cells, primary antibody was diluted at 1:1000, 4°over night



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

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