### For Research Use Only

# MICAL1 Polyclonal antibody

Catalog Number: 14818-1-AP

Featured Product

25 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 14818-1-AP BC052983

Concentration: GeneID (NCBI): 550 ug/ml 64780

Source: UNIPROT ID: Rabbit Q8TDZ2

Isotype: Full Name:

Immunogen Catalog Number:

AG6578

microtubule associated

monoxygenase, calponin and LIM domain containing 1

Calculated MW: 118 kDa Observed MW: 120 kDa Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:16000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:20-1:200 IF/ICC 1:200-1:800

**Applications** 

Tested Applications: WB, IHC, IF/ICC, IP, ELISA Cited Applications:

WB, IHC, IF, IP, CoIP
Species Specificity:

human
Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: Jurkat cells, HEK-293 cells, HeLa cells, human brain tissue. T-47D cells

IP: HeLa cells, T-47D cells

IHC: human lung tissue, human heart tissue, human ovary tissue, human placenta tissue, human skin tissue, human spleen tissue, human testis tissue

IF/ICC: A549 cells, HeLa cells

## **Background Information**

MICALs (Molecules Interacting with CasL) are atypical multidomain flavoenzymes with diverse cellular functions. There are three known isoforms, MICAL1, MICAL2 and MICAL3, as well as the MICAL-like proteins MICAL-L1 and MICAL-L2. MICAL1 has four conserved domains: an N-terminal flavin adenine dinucleotide (FAD) binding domain, a calponin homology (CH) domain, a Lin11, Isl-1 and Mec-3 (LIM) domain and a C-terminal coiled-coil (CC) domain. MICAL1 is reported to regulate actin stress fibers and be required for normal actin organization. It may also be involved in apoptosis through binding with NDR (nuclear Dbf2-related) kinases. This antibody specially recognizes MICAL1.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Sharon C Hook	33087848	Sci Rep	WB
Mst Sharifa Jahan	36451778	IBRO Neurosci Rep	IHC
Ze Zhang	34750518	Oncogene	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

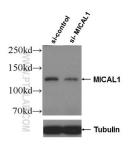
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

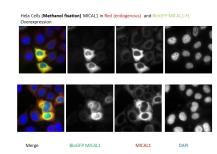
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

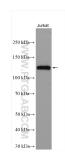
### Selected Validation Data



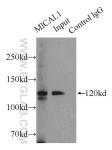
WB result of MICAL1 antibody (14818-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MICAL1 transfected HeLa cells.



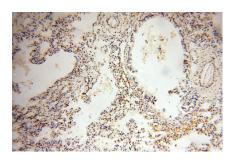
IF result of MICAL1 antibody (14818-1-AP) with Hela Cells (Methanol fixation) MICAL1 in Red (endogenous) and BioGFP-MICAL1-FL overexpression. Courtesy of Qingyang Liu, Utrecht University.



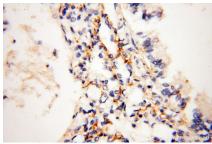
Jurkat cells were subjected to SDS PAGE followed by western blot with 14818-1-AP (MICAL1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



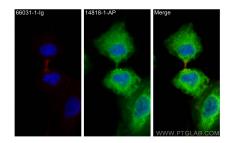
IP result of anti-MICAL1 (IP:14818-1-AP, 5ug; Detection:14818-1-AP 1:1000) with HeLa cells lysate 2000ug.



Immunohistochemical analysis of paraffinembedded human lung using 14818-1-AP (MICAL1 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human lung using 14818-1-AP (MICAL1 antibody) at dilution of 1:100 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed A549 cells using MICAL1 antibody (14818-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).