For Research Use Only

MICAL1 Polyclonal antibody

Catalog Number:14818-1-AP Featured Product 22 Publications

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Basic Information

Catalog Number:
14818-1-AP

Size:
150ul , Concentration: 550 µg/ml by Nanodrop and 267 µg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG6578

GenBank Accession Number:
BC052983

GeneID (NCBI):
64780

Full Name:
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 1:200-1:800

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, IF, IHC, WB

Species Specificity:
human, mouse

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, T-47D cells, HeLa cells, human brain tissue, mouse lung tissue

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 : 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

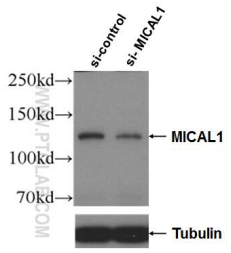
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

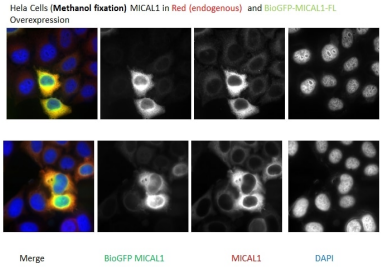
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

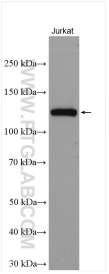
Selected Validation Data



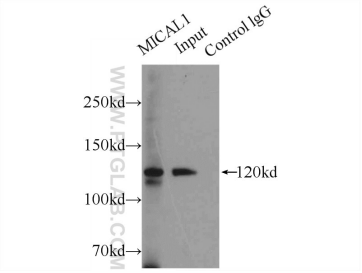
WB result of MICAL1 antibody (14818-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MICAL1 transfected HeLa cells.



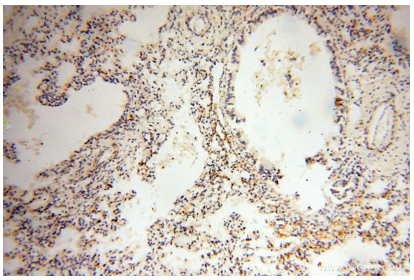
IF result of MICAL1 antibody (14818-1-AP) with Hela Cells (Methanol fixation) MICAL1 in Red (endogenous) and BioGFP-MICAL1-FL overexpression. Courtesy of Qingyang Liu, Utrecht University.



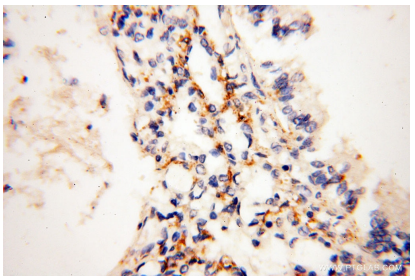
Jurkat cells were subjected to SDS PAGE followed by western blot with 14818-1-AP (MICAL1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



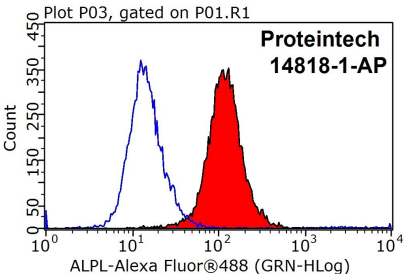
IP Result of anti-MICAL1 (IP:14818-1-AP, 5ug; Detection:14818-1-AP 1:1000) with HeLa cells lysate 2000ug.



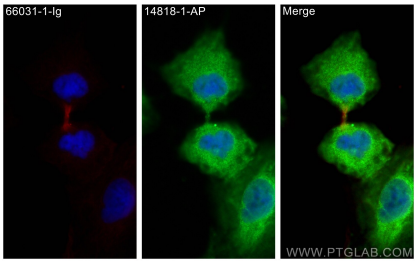
Immunohistochemical analysis of paraffin-embedded human lung using 14818-1-AP (MICAL1 antibody) at dilution of 1:100 (under 10x lens).



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



1X10^6 HeLa cells were stained with 0.2ug MICAL1 antibody (14818-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



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).