

For Research Use Only

# MICAL2 Polyclonal antibody

Catalog Number: 13965-1-AP

Featured Product

11 Publications



## Basic Information

### Catalog Number:

13965-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4950

### GenBank Accession Number:

BC044577

### GeneID (NCBI):

9645

### UNIPROT ID:

O94851

### Full Name:

microtubule associated monooxygenase, calponin and LIM domain containing 2

### Calculated MW:

127 kDa

### Observed MW:

95 kDa, 112 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

WB : DU 145 cells, PC-3 cells, U-251 cells, U-87 MG cells

IHC : human prostate cancer tissue,

IF/ICC : HepG2 cells,

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

## 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. MICAL2 has three conserved domains: an N-terminal flavin adenine dinucleotide (FAD) binding domain, a calponin homology (CH) domain, and a Lin11, Isl-1, and Mec-3 (LIM) domain. It has been demonstrated that MICAL2 could regulate actin stress fibers and is required for normal actin organization. In addition, MICAL2-PV, a novel splicing variant of MICAL2, has been reported to be involved in cancer progression of prostate cancer. This antibody can recognize both MICAL2 and MICAL2-PV. This antibody recognizes various isoforms of MICAL2 around 90-95 kDa or 109-112 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jingxia Han	36271377	J Nanobiotechnology	WB,IHC
Chenxiang Qi	34650666	Oxid Med Cell Longev	WB
Ze Zhang	34750518	Oncogene	WB,CoIP,IHC,IF

## 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

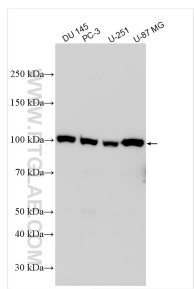
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

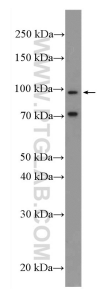
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

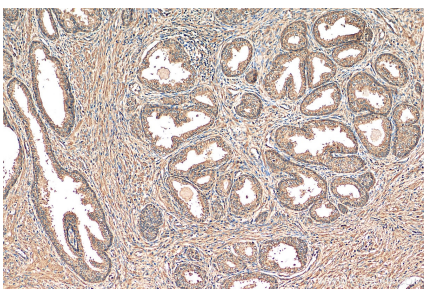
Selected Validation Data



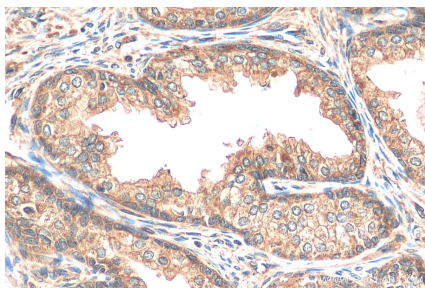
Various lysates were subjected to SDS PAGE followed by western blot with 13965-1-AP (MICAL2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



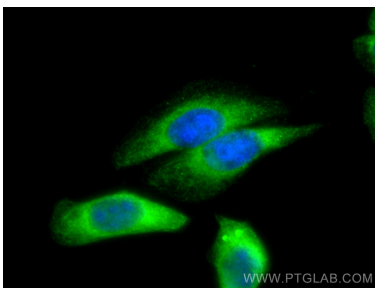
PC-3 cells were subjected to SDS PAGE followed by western blot with 13965-1-AP (MICAL2 Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



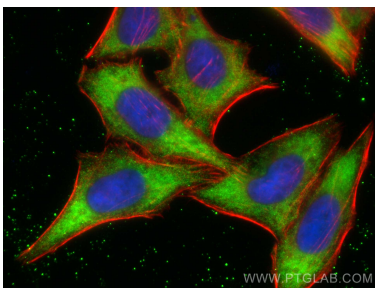
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 13965-1-AP (MICAL2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 13965-1-AP (MICAL2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using MICAL2 antibody (13965-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MICAL2 antibody (13965-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).