

MICAL1 Monoclonal antibody

Catalog Number: 68297-1-Ig

Basic Information

Catalog Number:

68297-1-Ig

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG6578

GenBank Accession Number:

BC052983

GeneID (NCBI):

64780

UNIPROT ID:

Q8TDZ2

Full Name:microtubule associated
monooxygenase, calponin and LIM
domain containing 1**Calculated MW:**

118 kDa

Observed MW:

120 kDa

Purification Method:

Protein G purification

CloneNo.:

3F5D4

Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total
protein lysate

IF/ICC: 1:1000-1:4000

FC (Intra): 0.40 ug per 10⁶ cells in a
100 µl suspension

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), IP, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:WB : A549 cells, RAW 264.7 cells, HSC-T6 cells, HeLa
cells, HEK-293 cells, HepG2 cells, Jurkat cells, MOLT-4
cells, K-562 cells

IP : HeLa cells,

IF/ICC : HeLa cells,

FC (Intra) : 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.

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

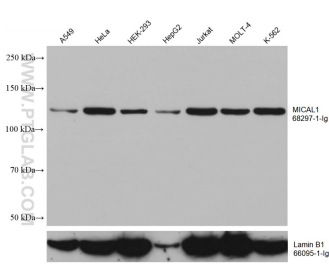
For technical support and original validation data for this product please contact:

T: 4006900926

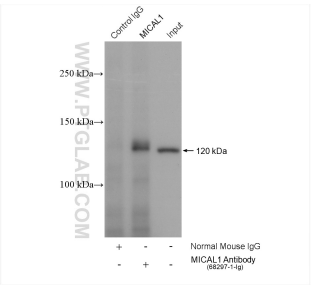
E: Proteintech-CN@ptglab.comW: ptgcn.com

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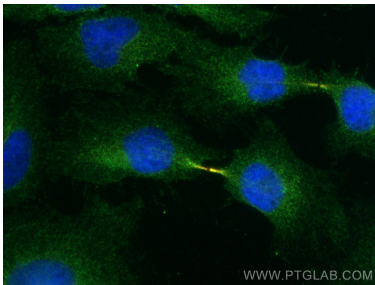
Selected Validation Data



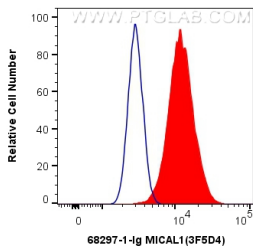
Various lysates were subjected to SDS PAGE followed by western blot with 68297-1-Ig (MICAL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Lamin B1 Monoclonal antibody (66095-1-Ig) as loading control.



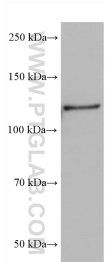
IP result of anti-MICAL1 (IP:68297-1-Ig, 4ug; Detection:68297-1-Ig 1:2000) with HeLa cells lysate 1720 ug.



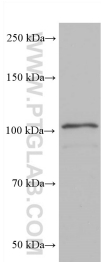
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MICAL1 antibody (68297-1-Ig, Clone: 3F5D4) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human MICAL1 (68297-1-Ig, Clone:3F5D4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 68297-1-Ig (MICAL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



HSC-T6 cells were subjected to SDS PAGE followed by western blot with 68297-1-Ig (MICAL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.