For Research Use Only

MICAL1 Monoclonal antibody

Catalog Number: 68297-1-Ig



Basic Information

Catalog Number: GenBank Accession Number:

Protein G purification 68297-1-lg BC052983 GeneID (NCBI): CloneNo.: 150ul, Concentration: 1000 µg/ml by 64780

Full Name: Source:

microtubule associated monoxygenase, calponin and LIM Mouse domain containing 1 Isotype:

Calculated MW: lgG1 118 kDa Immunogen Catalog Number:

AG6578 Observed MW: 120 kDa

Applications

Tested Applications:

FC, IF, IP, WB, ELISA Species Specificity:

Human, mouse, rat

3F5D4 Recommended Dilutions:

Purification Method:

WB 1:5000-1:50000

IP 0.5-4.0 ug for IP and 1:1000-1:4000

for WB

Positive Controls:

cells, K-562 cells IP: HeLa cells,

IF : HeLa cells, A549 cells

IF 1:1000-1:4000

WB: A549 cells, RAW 264.7 cells, HSC-T6 cells, HeLa

cells, HEK-293 cells, HepG2 cells, Jurkat cells, MOLT-4

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:

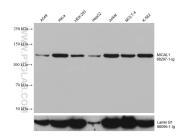
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

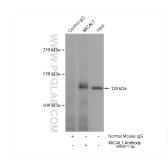
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

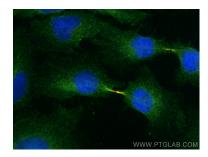
Selected Validation Data



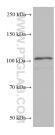
Various lysates were subjected to SDS PAGE followed by western blot with 68297-1-lg (MICAL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Lamin B1 Monoclonal antibody (66095-1-lg) as loading control.



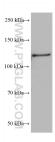
IP result of anti-MICAL1(IP:68297-1-lg, 4ug; Detection:68297-1-lg 1:2000) with HeLa cells lysate 1720 ug.



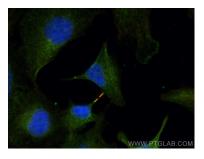
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MICAL1 antibody (68297-1-1g, Clone: 3F5D4) at dilution of 1:2000 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



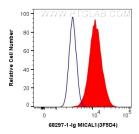
HSC-T6 cells were subjected to SDS PAGE followed by western blot with 68297-1-Ig (MICAL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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



Immunofluorescent analysis of (4% PFA) fixed A549 cells using MICAL1 antibody (68297-1-1g, Clone: 3F5D4) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human MICAL1 (68297-1-1g, 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 (PF00011-C).