For Research Use Only

MICAL1 Monoclonal antibody, PBS Only



Purification Method:

Protein G purification

CloneNo.:

3F5D4

Catalog Number: 68297-1-PBS

Basic Information

Catalog Number:

68297-1-PBS

100ug, Concentration: 1mg/ml by

Nanodrop:

Mouse Isotype:

lgG1

Immunogen Catalog Number:

AG6578

GenBank Accession Number:

BC052983 GeneID (NCBI):

64780

UNIPROT ID:

Q8TDZ2 Full Name:

microtubule associated

monoxygenase, calponin and LIM

domain containing 1

Calculated MW: 118 kDa

Observed MW:

120 kDa

Applications

Tested Applications:

WB, IP, IF/ICC, Indirect ELISA

Species Specificity:

Human, mouse, rat

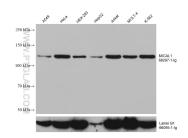
Background Information

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.

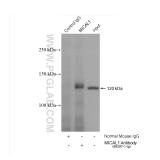
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

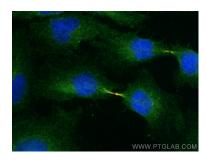
Selected Validation Data



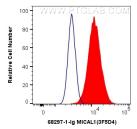
Various lysates were subjected to SDS PAGE followed by western blot with 68297-1-lg (MICAL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Lamin B1 Monoclonal antibody (66095-1-lg) as loading control. This data was developed using the same antibody clone with 68297-1-PBS in a different storage buffer formulation.



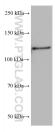
IP result of anti-MICAL1 (IP:68297-1-Ig, 4ug; Detection:68297-1-Ig 1:2000) with HeLa cells lysate 1720 ug. This data was developed using the same antibody clone with 68297-1-PBS in a different storage buffer formulation.



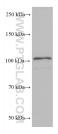
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MICAL1 antibody (68297-1-1g, Clone: 3F5D4) at dilution of 1:2000 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red). This data was developed using the same antibody clone with 68297-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 68297-1-PBS in a different storage buffer formulation



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. This data was developed using the same antibody clone with 68297-1-PBS in a different storage buffer formulation.



HSC-T6 cells 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. This data was developed using the same antibody clone with 68297-1-PBS in a different storage buffer formulation.