For Research Use Only

mDia1 Polyclonal antibody

Catalog Number:20624-1-AP Featured Product 17 Publications

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Basic Information

Catalog Number:
20624-1-AP

Size:
150ul , Concentration: 500 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG14523

GenBank Accession Number:
BC007411

GeneID (NCBI):
1729

Full Name:
diaphanous homolog 1 (Drosophila)

Calculated MW:
1272 aa, 141 kDa

Observed MW:
140-150 kDa, 70 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:8000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF 1:50-1:500

Applications

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

Cited Applications:
ChIP, IF, IHC, WB

Species Specificity:
human, mouse, rat, monkey

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 : HeLa cells, human heart tissue, human skeletal muscle tissue, COS-7 cells, NIH/3T3 cells, MDA-MB-231 cells, HUVEC cells

IP : HeLa cells,

IHC : mouse kidney tissue,

IF : HeLa cells, HepG2 cells

Background Information

mDia1, also known as DIAPH1 or Diap1, is a mammalian diaphanous-related formin which is implicated in multiple physical and pathological events including cytoskeletal dynamics, autosomal hearing loss, and myelodysplasia. Depending upon the cell type and position in the cell cycle, mDia1 has been shown to localize to the cell cortex, trafficking endosomes, cleavage furrow, mid-bodies, and centrosomes, the cytoplasmic microtubule-organizing center crucial for cell division. Mutation of mDia1 has been linked to microcephaly. This antibody recognizes the endogenous mDia1 mainly around 140-150 kDa, while sometimes an additional 70 kDa can also be observed which is proposed to be a fragment of 140-150 kDa molecules (26011179).

Notable Publications

Author	Pubmed ID	Journal	Application
Jessica D Arden	26354425	Mol Biol Cell	WB, IF
Yan Guo	36198275	Cell Rep	WB
Fernando R Valencia	34822787	Dev Cell	WB

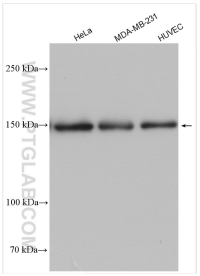
Storage

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

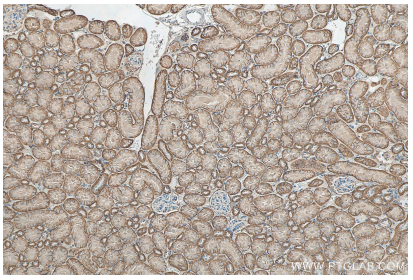
*** 20ul sizes contain 0.1% BSA

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

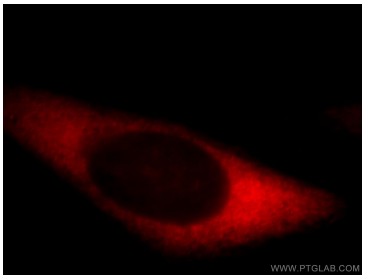
Selected Validation Data



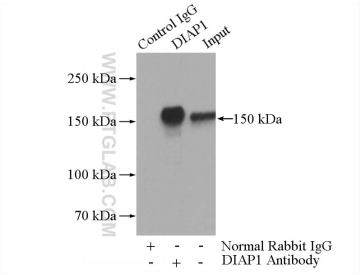
Various lysates were subjected to SDS PAGE followed by western blot with 20624-1-AP (mDia1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



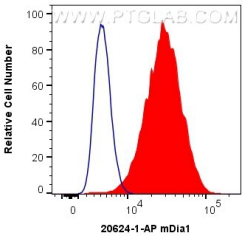
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 20624-1-AP (mDia1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



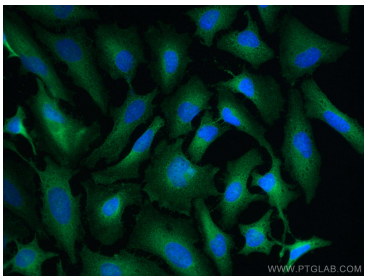
Immunofluorescent analysis of HepG2 cells, using DIAPH1 antibody 20624-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



IP Result of anti-mDia1 (IP:20624-1-AP, 4ug; Detection:20624-1-AP 1:500) with HeLa cells lysate 1200ug.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human mDia1 (20624-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using mDia1 antibody (20624-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).