

For Research Use Only

# DIAPH3 Polyclonal antibody

Catalog Number: 14342-1-AP

Featured Product

25 Publications



## Basic Information

### Catalog Number:

14342-1-AP

### Size:

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

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5656

### GenBank Accession Number:

BC048963

### GeneID (NCBI):

81624

### UNIPROT ID:

Q9NSV4

### Full Name:

diaphanous homolog 3 (Drosophila)

### Calculated MW:

137 kDa

### Observed MW:

125-137 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:2000

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

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### 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, DU 145 cells, HEK-293 cells

IP : HeLa cells,

IHC : mouse testis tissue, human cervical cancer tissue, rat testis tissue, human prostate cancer tissue

IF/ICC : HeLa cells,

## Background Information

DIAPH3 is also referred as diaphanous-related formin-3 which binds to GTP-bound form of Rho and to profilin, acts in a Rho-dependent manner to recruit profilin to the membrane. It is required for cytokinesis, stress fiber formation, and transcriptional activation of the serum response factor. Seven isoforms of DIAPH3 exist due to the alternative splicing. Recently it has been reported that dimerization and actin assembly activity of DIAPH3 isoforms 1 and 7 are essential for induction of specific cell protrusions. It may propose that isoform-selective actin assembly by DIAPH3 exerts specific and differentially regulated functions during cell adhesion and motility.

## Notable Publications

Author	Pubmed ID	Journal	Application
Esmeralda Castelblanco	27796194	Thyroid	
Renli Huang	35538918	Cancer Med	WB, IHC
Kathryn N Becker	35563863	Cells	WB

## 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

\*\*\* 20ul sizes contain 0.1% BSA

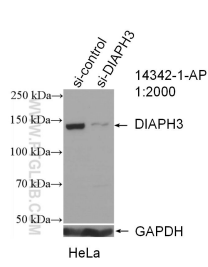
For technical support and original validation data for this product please contact:

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

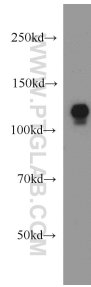
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

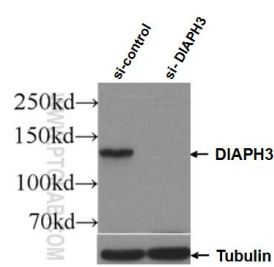
Selected Validation Data



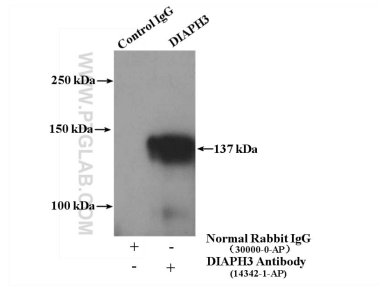
WB result of DIAPH3 antibody (14342-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-DIAPH3 transfected HeLa cells.



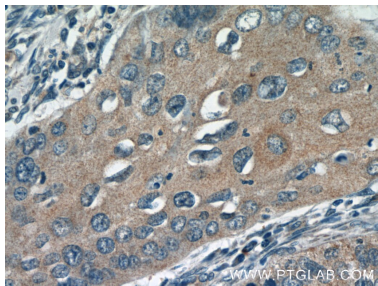
HeLa cells were subjected to SDS PAGE followed by western blot with 14342-1-AP (DIAPH3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



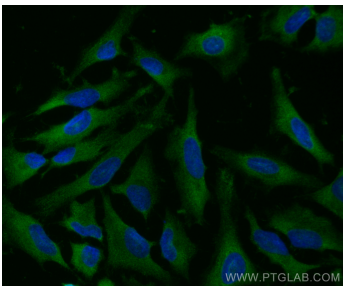
WB result of DIAPH3 antibody (14342-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-DIAPH3 transfected HEK-293 cells.



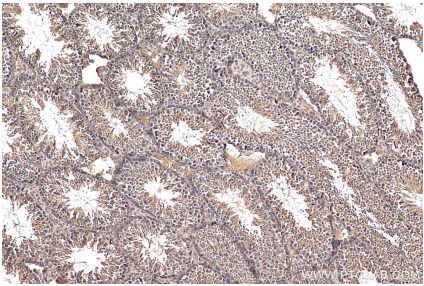
IP result of anti-DIAPH3 (IP:14342-1-AP, 4ug; Detection:14342-1-AP 1:500) with HeLa cells lysate 2000ug.



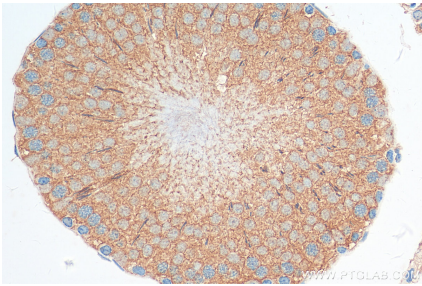
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 14342-1-AP (DIAPH3 Antibody) at dilution of 1:50.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using DIAPH3 antibody (14342-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 14342-1-AP (DIAPH3 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 rat testis tissue slide using 14342-1-AP (DIAPH3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).