

For Research Use Only

# RIF1 Polyclonal antibody

Catalog Number: 30119-1-AP



## Basic Information

<b>Catalog Number:</b> 30119-1-AP	<b>GenBank Accession Number:</b> NM_001177663.1	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 600 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 55183	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:400-1:1600 IF 1:600-1:2400
<b>Source:</b> Rabbit	<b>Full Name:</b> RAP1 interacting factor homolog (yeast)	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 274 kDa	
<b>Immunogen Catalog Number:</b> AG32422	<b>Observed MW:</b> 300 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Species Specificity:

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:** A431 cells, HEK-293T cells, HT-29 cells, HeLa cells, HepG2 cells, MCF-7 cells

**IHC:** human cervical cancer tissue, mouse testis tissue

**IF:** HeLa cells, HEK-293 cells

## Background Information

RIF1 (Rap1-interacting factor 1) is a multifunctional chromosome stability protein implicated in controlling DNA replication and repair. Human RIF1 can interact with protein phosphatase 1 (PP1) and the interaction is crucial for controlling DNA replication by limiting phosphorylation of the MCM complex (PMID: 28077461). RIF1 also acts with PP1 to protect nascent DNA from overdegradation at stalled replication forks (PMID: 31141682). RIF1 promotes non-homologous end joining (NHEJ) in double strand break (DSB) repair (PMID: 30443189). Research studies show that RIF1 is overexpressed in breast cancer tissues and is upregulated in NSCLC tissues (PMID: 30237512).

## 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

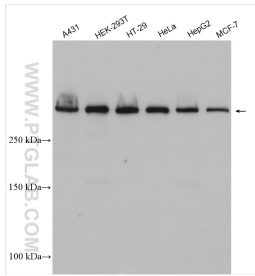
For technical support and original validation data for this product please contact:

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

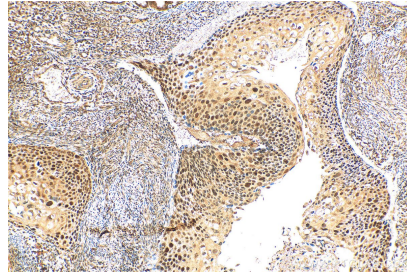
E: proteintech@ptglab.com  
W: ptglab.com

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

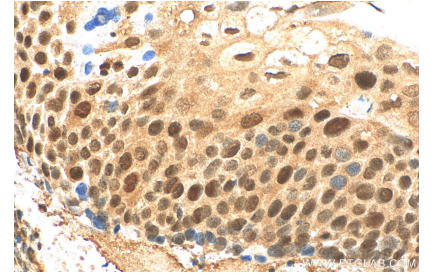
## Selected Validation Data



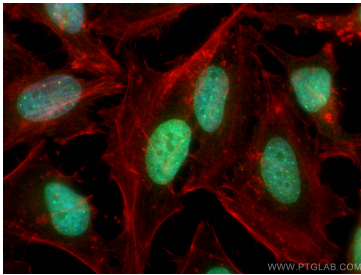
Various lysates were subjected to SDS PAGE followed by western blot with 30119-1-AP (RIF1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



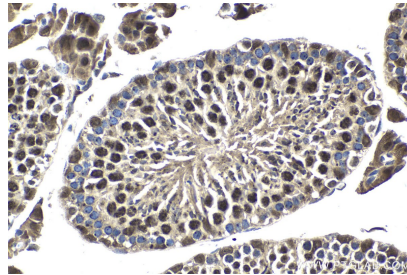
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 30119-1-AP (RIF1 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 30119-1-AP (RIF1 antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using RIF1 antibody (30119-1-AP) at dilution of 1:1200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 30119-1-AP (RIF1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).