

For Research Use Only

# RTCB-Specific Polyclonal antibody

Catalog Number: 19809-1-AP

Featured Product

8 Publications



## Basic Information

### Catalog Number:

19809-1-AP

### Concentration:

800 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG13836

### GenBank Accession Number:

BC000151

### GeneID (NCBI):

51493

### UNIPROT ID:

Q9Y3I0

### Full Name:

chromosome 22 open reading frame 28

### Calculated MW:

55 kDa

### Observed MW:

55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:6000

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

IHC: 1:1000-1:4000

IF/ICC: 1:200-1:800

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, pig

**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, mouse brain tissue, Jurkat cells

IP : HeLa cells,

IHC : human lung cancer tissue, human liver cancer tissue, human stomach cancer tissue

IF/ICC : HeLa cells,

FC (Intra) : A431 cells, HeLa cells

## Background Information

RTCB (also known as HSPC117, C22orf28, FAAP, and D10Wsu52e) is a essential subunit of the tRNA ligase complex, which is localized in both the cytoplasm and nucleus, and is involved in RNA repair and stress-induced splicing. As a multifunctional protein, RTCB also serves as a cell adhesion protein and plays an important role in embryo and placenta development. Recently, RTCB has been identified as an UPR RNA ligase that catalyzes unconventional XBP1 mRNA splicing. This antibody specifically recognizes endogenous RTCB protein. (25087875)

## Notable Publications

Author	Pubmed ID	Journal	Application
Yichen Xu	34559986	Cell	WB
Irem Unlu	30355738	J Biol Chem	WB
Carmen Aguilar	34099666	Nat Commun	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

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

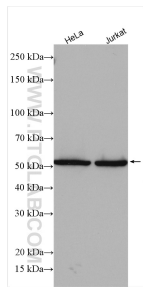
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

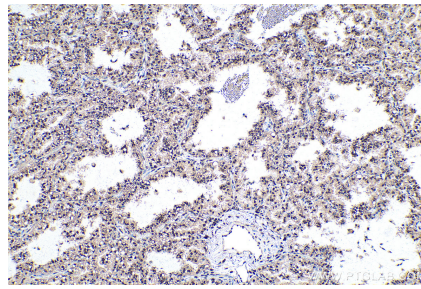
W: [ptgcn.com](http://ptgcn.com)

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

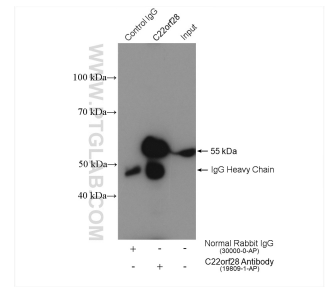
## Selected Validation Data



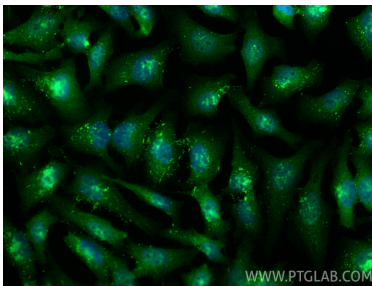
Various lysates were subjected to SDS PAGE followed by western blot with 19809-1-AP (RtcB-Specific antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



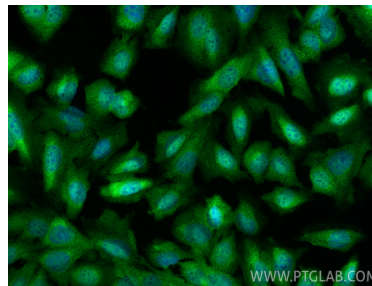
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19809-1-AP (RtcB-Specific antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



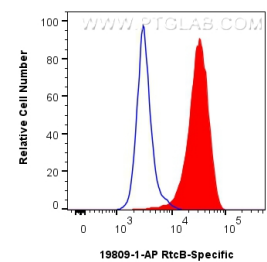
IP result of anti-RtcB-Specific (IP:19809-1-AP, 4ug; Detection:19809-1-AP 1:4000) with HeLa cells lysate 1800 ug.



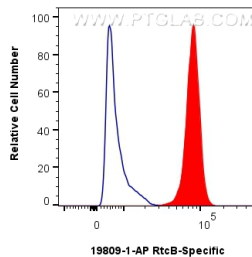
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using RtcB-Specific antibody (19809-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using RtcB-Specific antibody (19809-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25 ug RtcB-Specific Polyclonal antibody (19809-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



$1 \times 10^6$  A431 cells were intracellularly stained with 0.25 ug RtcB-Specific Polyclonal antibody (19809-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).