

For Research Use Only

# GRP94 Polyclonal antibody

Catalog Number: 14700-1-AP

Featured Product

50 Publications



## Basic Information

### Catalog Number:

14700-1-AP

### Concentration:

400 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6344

### GenBank Accession Number:

BC066656

### GeneID (NCBI):

7184

### UNIPROT ID:

P14625

### Full Name:

heat shock protein 90kDa beta (Grp94), member 1

### Calculated MW:

92 kDa

### Observed MW:

100 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

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

IHC 1:20-1:200

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

**WB**: A431 cells, HEK-293 cells, A549 cells, HeLa cells, HepG2 cells, MCF-7 cells, U2OS cells

**IP**: mouse liver tissue,

**IHC**: human breast cancer tissue, human cervical cancer tissue

**IF/ICC**: HeLa cells, HepG2 cells, A431 cells

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Glucose-regulated protein 94 (GRP94), also called HSP90B1 and GP96, is an endoplasmic reticulum (ER)-resident member of the heat shock protein 90 (HSP90) family (PMID: 33802964; 24658275). Under ER stress conditions, GRP94 accelerates its function as a molecular chaperone. Client proteins of GRP94 include toll-like receptors (TLRs), glycoprotein (GP) IX subunit, insulin-like growth factors (IGFs), proinsulin, and integrins (PMID: 7913987; 32781621; 22079671). As well as being an ER chaperone, GRP94 can also participate in Calcium regulation and is also a regulator of innate and adaptive immunity (PMID: 33802964; 11584270).

## Notable Publications

Author	Pubmed ID	Journal	Application
Na Liu	32961227	Life Sci	WB
Piaopiao Wen	36139350	Cells	WB
Chang Feng	30445054	Toxicology	

## 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

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

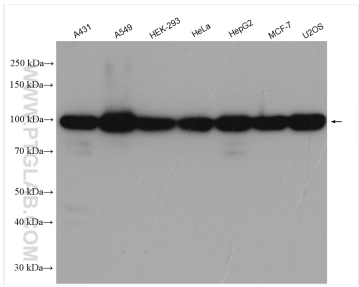
T: 4006900926

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

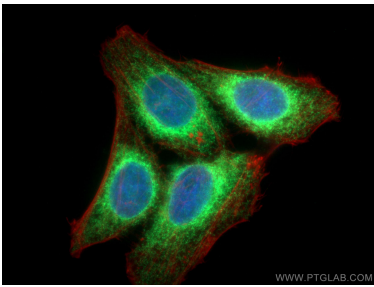
W: [ptgcn.com](http://ptgcn.com)

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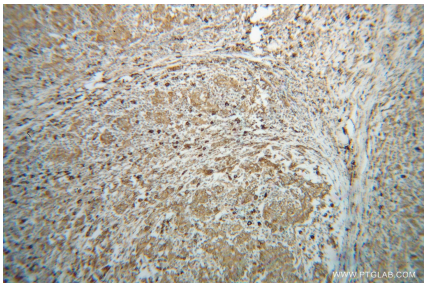
Selected Validation Data



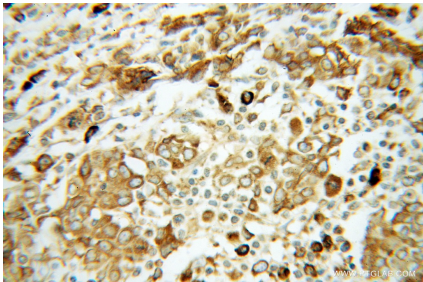
Various lysates were subjected to SDS PAGE followed by western blot with 14700-1-AP (GRP94 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



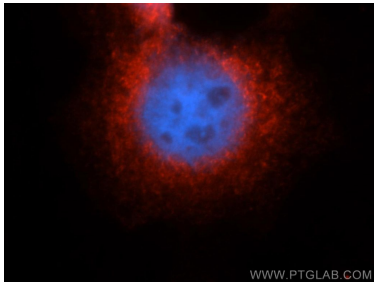
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using GRP94 antibody (14700-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



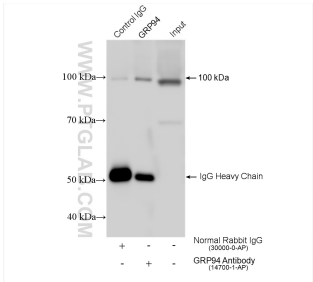
Immunohistochemical analysis of paraffin-embedded human breast cancer using 14700-1-AP (HSP90B1 antibody) at dilution of 1:100 (under 10x lens).



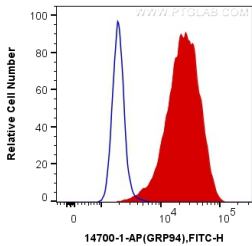
Immunohistochemical analysis of paraffin-embedded human breast cancer using 14700-1-AP (HSP90B1 antibody) at dilution of 1:100 (under 40x lens).



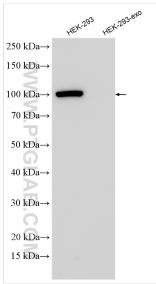
Immunofluorescent analysis of A431 cells, using HSP90B1 antibody 14700-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



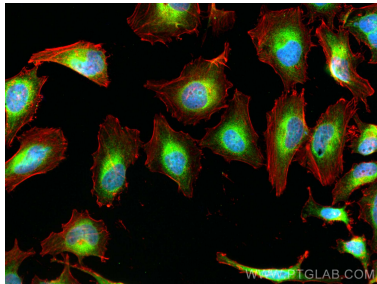
IP result of anti-GRP94 (IP:14700-1-AP, 4ug; Detection:14700-1-AP 1:2000) with mouse liver tissue lysate 1560 ug.



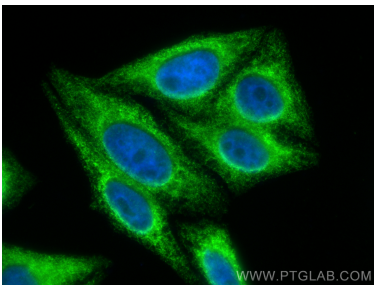
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP94 (14700-1-AP) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



HEK-293 cells and HEK-293-derived exosomes (HEK-293-exo) were subjected to SDS PAGE followed by western blot with 14700-1-AP (GRP94 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using GRP94 antibody (14700-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using GRP94 antibody (14700-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).