

For Research Use Only

GRP94 Polyclonal antibody

Catalog Number: 14700-1-AP

Featured Product

51 Publications



Basic Information

Catalog Number:

14700-1-AP

Size:

150ul, Concentration: 400 ug/ml by Nanodrop;

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 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:500-1:2000

IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF, ColP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

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-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, U2OS cells

FC (Intra): HeLa cells,

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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

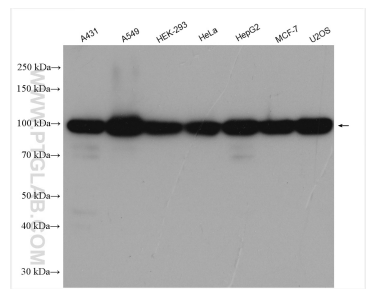
For technical support and original validation data for this product please contact:

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

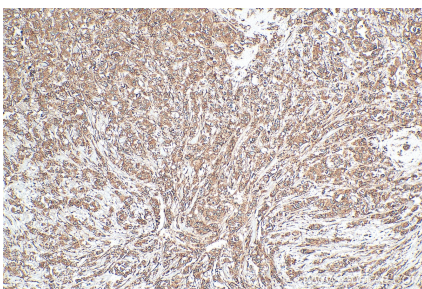
E: proteintech@ptglab.com
W: ptglab.com

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

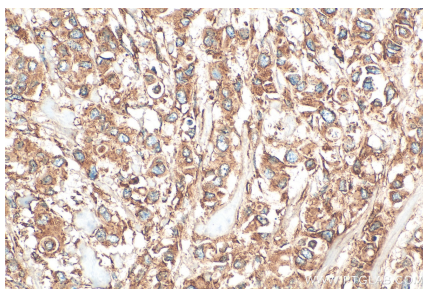
Selected Validation Data



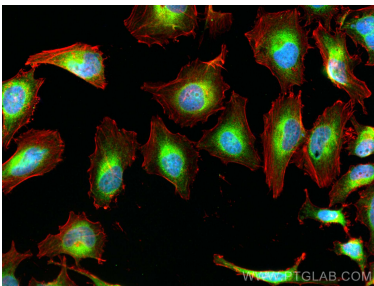
Various lysates were subjected to SDS PAGE followed by western blot with 14700-1-AP (GRP94 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



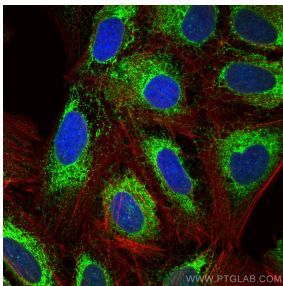
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14700-1-AP (GRP94 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



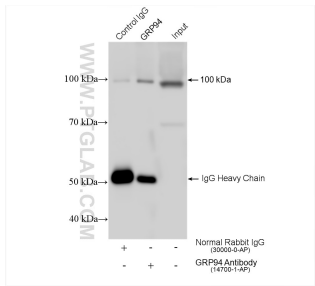
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14700-1-AP (GRP94 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



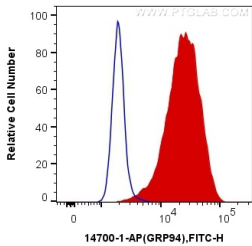
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using GRP94 antibody (14700-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



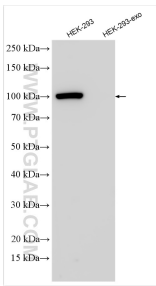
Immunofluorescent analysis of (4% PFA) fixed U2OS cells using GRP94 antibody (14700-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



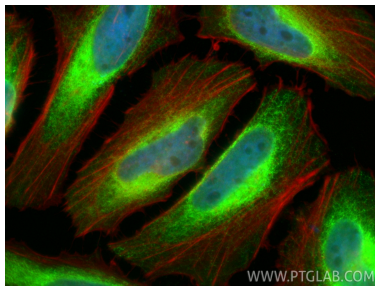
IP result of anti-GRP94 (IP:14700-1-AP, 4ug; Detection:14700-1-AP 1:2000) with mouse liver tissue lysate 1560 ug.



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP94 (14700-1-AP) and CoraLite®488-Conjugated AffiniPure 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) (SA00013-2), CL594-phalloidin (red).