## For Research Use Only

# GRP94 Polyclonal antibody

Catalog Number: 10979-1-AP

Featured Product

7 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

10979-1-AP BC009195 GeneID (NCBI): Size:

150ul, Concentration: 500 ug/ml by Nanodrop and 227 ug/ml by Bradford  $\,$  UNIPROT ID: method using BSA as the standard; P14625

Source: Full Name: Rabbit

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

Calculated MW: Immunogen Catalog Number: 96 kDa

AG1439 Observed MW: 94 kDa

**Tested Applications:** 

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

**Cited Applications:** WB, IHC, IF Species Specificity: human, mouse, rat

Cited Species: human, mouse, rat, pig

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

**Purification Method:** Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF-P 1:50-1:500 IF/ICC 1:200-1:800

**Applications** 

Positive Controls:

WB: A549 cells, HEK-293 cells, K-562 cells, MCF-7 cells, NIH/3T3 cells

IP: MCF-7 cells

IHC: human colon tissue, human breast cancer tissue, human lung cancer tissue, mouse brain tissue

IF-P: mouse pancreas tissue, human appendicitis

tissue

IF/ICC: HEK-293 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
Maojun Liu	28990064	Mol Med Rep	WB
Liang Zhang	33721634	Vet Microbiol	WB
Na Liu	35093118	J Neuroinflammation	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

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

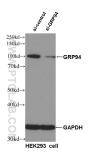
For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free

in USA), or 1(312) 455-8498 (outside USA)

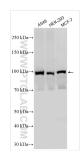
E: proteintech@ptglab.com W: ptglab.com

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

### Selected Validation Data



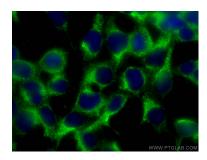
WB result of GPR94 antibody (10979-1-AP, 1:1000) with si-control and si-GPR94 transfected HEK293 cells..



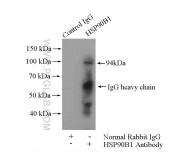
Various lysates were subjected to SDS PAGE followed by western blot with 10979-1-AP (GRP94 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



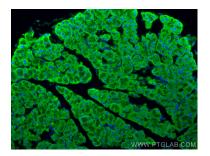
Immunohistochemical analysis of paraffinembedded human breast cancer using 10979-1-AP (HSP90B1 antibody) at dilution of 1:50 (under 10x lens)



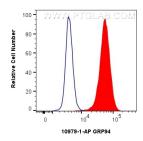
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using GRP94 antibody (10979-1-AP) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



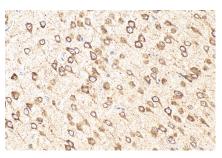
IP result of anti-GRP94 (IP:10979-1-AP, 4ug; Detection:10979-1-AP 1:500) with MCF-7 cells lysate 4000ug.



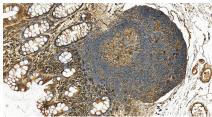
Immunofluorescent analysis of (4% PFA) fixed mouse pancreas tissue using GRP94 antibody (10979-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



1x10^6 MCF-7 cells were intracellularly stained with 0.8 ug GRP94 Polyclonal antibody (10979-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(I+L) (SA00013-2)(red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 10979-1-AP (GRP94 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 10979-1-AP (GRP94 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).