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

 Concentration:
 GeneID (NCBI):

 500 ug/ml
 7184

 Source:
 UNIPROT ID:

 Rabbit
 P14625

Isotype: Full Name:
IgG heat shock protein 90kDa beta

Immunogen Catalog Number: (Grp94), member 1
AG1439 Calculated MW:

96 kDa Observed N

Observed MW: 94 kDa 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

FC (Intra): 0.80 ug per 10^6 cells in a

100 µl suspension

Applications

Tested Applications:

WB, IHC, 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

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

FC (Intra): MCF-7 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.

Storage Buffe

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

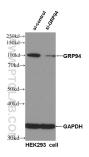
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

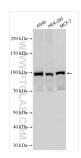
W: ptgcn.cor

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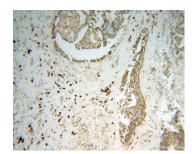
Selected Validation Data



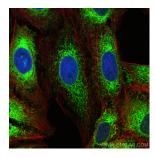
WB result of GPR94 antibody (10979-1-AP, 1:1000) with si-control and si-GPR94 transfected HEK293 cells..



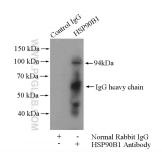
Various lysates were subjected to SDS PAGE followed by western blot with 10979-1-AP (GRP94 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



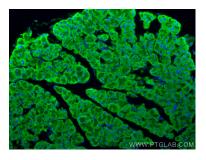
Immunohistochemical analysis of paraffinembedded human breast cancer using 10979-1-AP (HSP90B1 antibody) at dilution of 1:50 (under 10x lens)



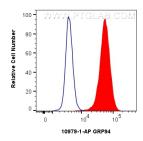
Immunofluorescent analysis of (4% PFA) fixed U2OS cells using GRP94 antibody (10979-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



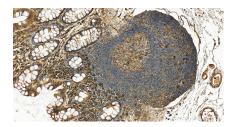
IP result of anti-GRP94 (IP:10979-1-AP, 4ug; Detection:10979-1-AP 1:500) with MCF-7 cells lysate 4000ug.



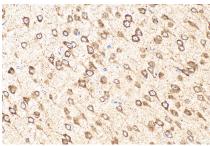
Immunofluorescent analysis of (4% PFA) fixed mouse pancreas tissue using GRP94 antibody (10979-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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(H+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 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).



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).