

For Research Use Only

# GRP78/BIP Polyclonal antibody

Catalog Number: 11587-1-AP

Featured Product

707 Publications



## Basic Information

### Catalog Number:

11587-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG2188

### GenBank Accession Number:

BC020235

### GeneID (NCBI):

3309

### UNIPROT ID:

P11021

### Full Name:

heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)

### Calculated MW:

78 kDa

### Observed MW:

70-78 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:12000

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

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, rabbit, monkey, chicken, fish, carp, medaka embryos, deer

**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:** BxPC-3 cells, Caco-2 cells, HEK-293 cells, HeLa cells, HepG2 cells, mouse brain tissue, mouse liver tissue, rat brain tissue, rat liver tissue, HT-29 cells

**IP:** MCF-7 cells,

**IHC:** human pancreas cancer tissue, human breast cancer tissue, mouse kidney tissue, rat brain tissue, mouse heart tissue, human colon cancer tissue

**IF/ICC:** HepG2 cells, Thapsigargin treated HepG2 cells

**FC (Intra):** HeLa cells,

## Background Information

GRP78 (HSPA5), also referred to as 'immunoglobulin heavy chain-binding protein' (BiP), is a member of the heat-shock protein-70 (HSP70) family and is involved in the folding and assembly of proteins in the endoplasmic reticulum (ER). It is a constitutively expressed resident protein of the ER in all eukaryotic cells. Recently it has been reported that GRP78 is associated with apoptosis or inhibition of cancer cell growth. 11587-1-AP antibody recognizes one or two bands with MW 70-78 kDa for the signal peptide of GRP78 protein can be finally cleaved.

## Notable Publications

Author	Pubmed ID	Journal	Application
Junxia Hu	31580970	Biomed Pharmacother	WB
Qi Zhang	36177897	Int J Oncol	IF
Bing Sun	27684953	PLoS One	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

\*\*\* 20ul sizes contain 0.1% BSA

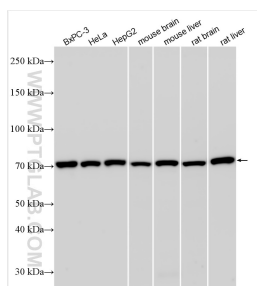
For technical support and original validation data for this product please contact:

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

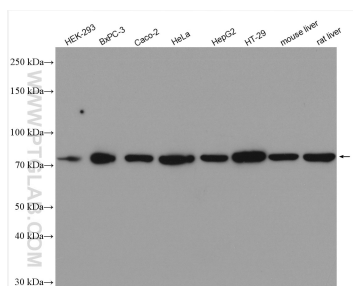
E: proteintech@ptglab.com  
W: ptglab.com

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

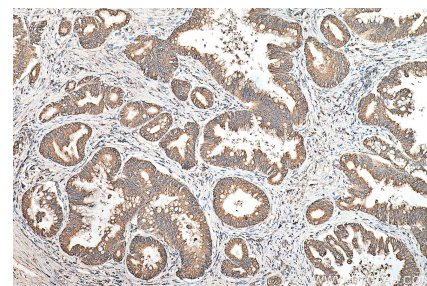
## Selected Validation Data



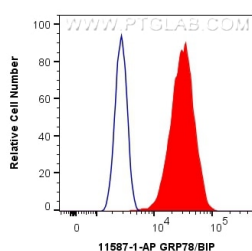
Various lysates were subjected to SDS PAGE followed by western blot with 11587-1-AP (GRP78/BIP antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



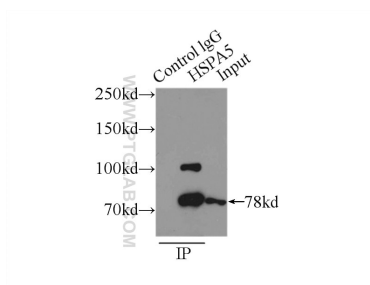
Various lysates were subjected to SDS PAGE followed by western blot with 11587-1-AP (GRP78/BIP antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



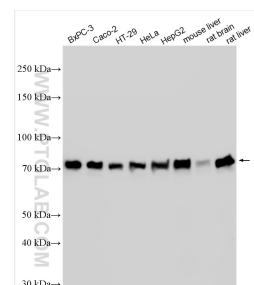
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 11587-1-AP (GRP78/BIP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



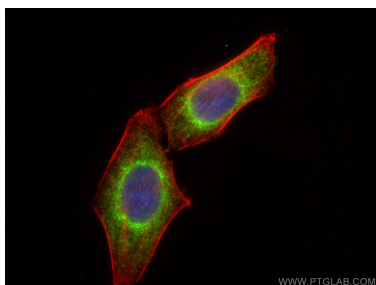
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP78/BIP (11587-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



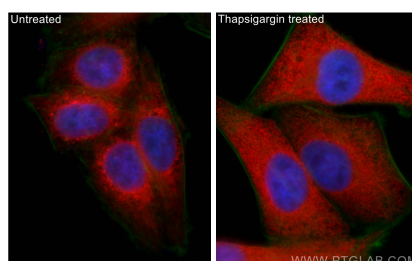
IP result of anti-GRP78/BIP (IP:11587-1-AP, 3ug; Detection:11587-1-AP 1:1000) with MCF-7 cells lysate 3250ug.



Various lysates were subjected to SDS PAGE followed by western blot with 11587-1-AP (GRP78/BIP antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using GRP78/BIP antibody (11587-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed Thapsigargin treated HepG2 cells using GRP78/BIP antibody (11587-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4), CL488-Phalloidin (green).