

For Research Use Only

GRP78/BIP Polyclonal antibody

Catalog Number: 11587-1-AP

Featured Product

724 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 10⁶ 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, canine, chicken, bovine, hamster, goat, fish, deer, carp, medaka embryos

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

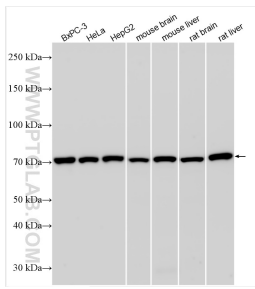
For technical support and original validation data for this product please contact:

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

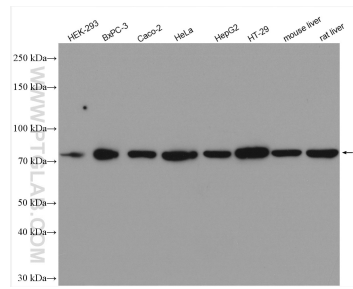
E: proteintech@ptglab.com
W: ptglab.com

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

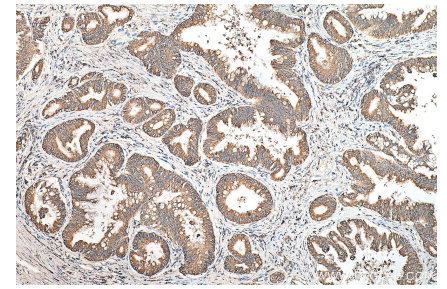
Selected Validation Data



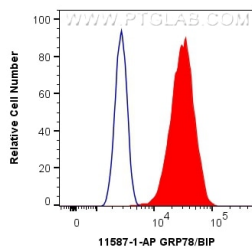
Various lysates were subjected to SDS PAGE followed by western blot with 11587-1-AP (GRP78/BIP antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



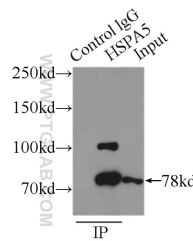
Various lysates were subjected to SDS PAGE followed by western blot with 11587-1-AP (GRP78/BIP antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



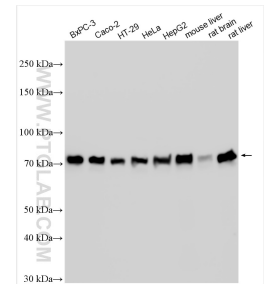
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 11587-1-AP (GRP78/BIP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



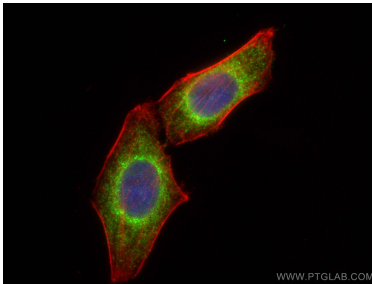
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human GRP78/BIP (11587-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



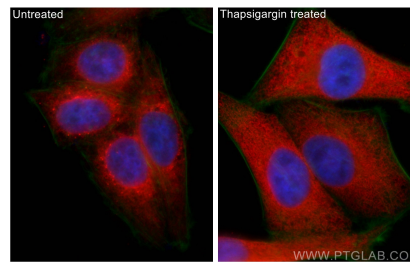
IP result of anti-GRP78/BIP (IP:11587-1-AP, 3ug; Detection:11587-1-AP 1:1000) with MCF-7 cells lysate 3250ug.



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).