

For Research Use Only

GRP78/BIP Monoclonal antibody

Catalog Number: 66574-1-Ig

Featured Product

96 Publications



Basic Information

Catalog Number:

66574-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

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:

Protein G purification

CloneNo.:

1D6F7

Recommended Dilutions:

WB: 1:5000-1:50000

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

IHC: 1:500-1:2000

IF/ICC: 1:400-1:1600

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, chicken, zebrafish

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: HepG2 cells, HeLa cells, A549 cells, MCF-7 cells, Jurkat cells, HSCT6 cells, HSC-T6 cells, PC-12 cells, NIH/3T3 cells, SP2/O cell, 4T1 cells

IP: SGC-7901 cells,

IHC: human liver cancer tissue, human colon cancer tissue, human breast cancer tissue

IF/ICC: thapsigargin treated U2OS 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Xiuwen Yang	36246276	Front Microbiol	WB
Yu Chen	34592660	Cell Calcium	WB
Li Ma	36056472	Int Wound J	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

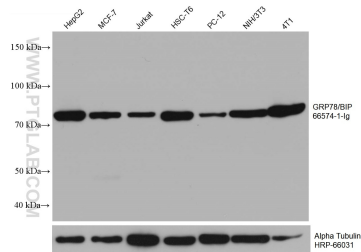
For technical support and original validation data for this product please contact:

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

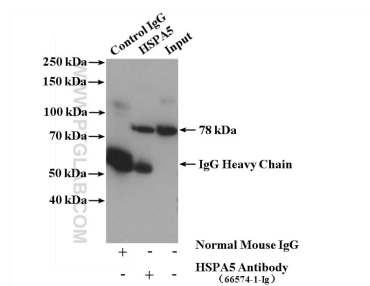
E: proteintech@ptglab.com
W: ptglab.com

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

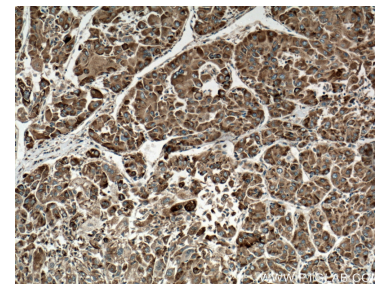
Selected Validation Data



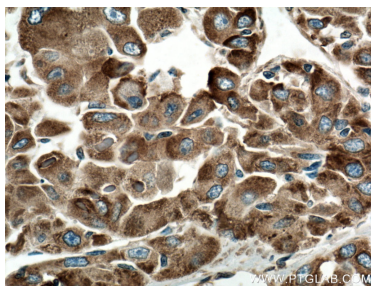
Various lysates were subjected to SDS PAGE followed by western blot with 66574-1-Ig (GRP78/BIP antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



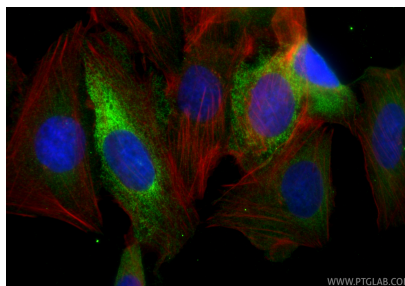
IP result of anti-GRP78/BIP (IP:66574-1-Ig, 5ug; Detection:66574-1-Ig 1:3000) with SGC-7901 cells lysate 2200 ug.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66574-1-Ig (GRP78/BIP 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 liver cancer tissue slide using 66574-1-Ig (GRP78/BIP 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 thapsigargin treated U2OS cells using GRP78/BIP antibody (66574-1-Ig, Clone: 1D6F7) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red).