For Research Use Only

GRP78/BIP Monoclonal antibody

Catalog Number:66574-1-lg Featured Product

83 Publications



Basic Information

Catalog Number: 66574-1-lg Concentration: 1000 μg/ml

Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG2188

GenBank Accession Number:

BC020235 GeneID (NCBI): 3309 **UNIPROT ID:** P11021

Full Name: heat shock 70kDa protein 5 (glucose- protein lysate 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

IHC 1:500-1:2000 IF/ICC 1:50-1:500

Applications

Tested Applications: WB, IHC, IF/ICC, IP, ELISA **Cited Applications:**

WB, IHC, IF, IP, CoIP Species Specificity: Human, rat, mouse 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. SP2/0 cell. 4T1 cells

IP: SGC-7901 cells,

IHC: human liver cancer tissue, human colon cancer

tissue, human breast cancer tissue

IF/ICC: HeLa cells,

Background Information

GRP78 (HSPA5), also referred to as 'immunoglobulin heavy chain-binding protein' (BiP), is a member of the heatshock 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

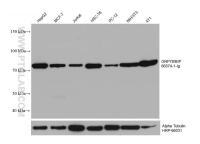
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

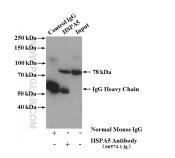
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

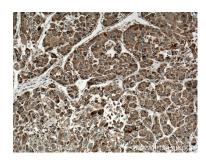
Selected Validation Data



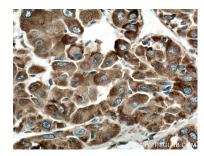
Various lysates were subjected to SDS PAGE followed by western blot with 66574-1-1g (GRP78/BIP antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



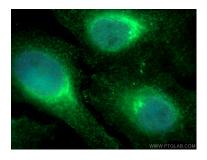
IP result of anti-GRP78/BIP (IP:66574-1-Ig, 5ug; Detection:66574-1-Ig 1:3000) with SGC-7901 cells lysate 2200 ug.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66574-1-1g (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 paraffinembedded human liver cancer tissue slide using 66574-1-1g (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 Hela cells using 66574-1-Ig (GRP78/BIP antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated Goat Anti-Mouse IgG(H+L).