For Research Use Only

GRP75 Polyclonal antibody

Catalog Number: 14887-1-AP

Featured Product

33 Publications



Basic Information

 Catalog Number:
 GenBank Accession Number:

 14887-1-AP
 BC000478

 Size:
 GeneID (NCBI):

 400 μ g/ml
 3313

 Source:
 UNIPROT ID:

 Rabbit
 P38646

Isotype: Full Name: IF 1:200-1:800 lgG heat shock 70kDa protein 9 (mortalin)

Immunogen Catalog Number: Calculated MW:

AG6673 74 kDa

Observed MW: 74-75 kDa

Applications

Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

IF, IP, WB

Species Specificity: human, mouse, rat

Cited Species: human, rat, mouse

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: HT-29 cells, A549 cells, mouse testis tissue, Jurkat cells, NIH/3T3 cells, mouse liver

Purification Method:

WB 1:5000-1:50000

IHC 1:1000-1:4000

protein lysate

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

IP: mouse brain tissue, NIH/3T3 cells
IHC: human breast cancer tissue,

IF: HepG2 cells,

Background Information

GRP75 (also known as mortalin, HSPA9 or mt-Hsp70) is a constitutively expressed member of the HSPA (HSP70) family of heat-shock proteins. It is located in the mitochondrial matrix and anti-GRP75 is commonly used as the marker for mitochondria. It has been reported that GRP75 is enriched in cancer cells and contributes to carcinogenesis. In addition, decreased expression level of GRP75 has been found in neurodegenerative disorders like Parkinson's disease. This antibody recognized the endogenous GRP75 protein in NIH/3T3 cells. (PMID: 21640711, 22920904)

Notable Publications

Author	Pubmed ID	Journal	Application
Olga Zurita Rendón	30061372	Mol Cell Biol	
Chih-Hao Wang	36158195	Front Cell Dev Biol	WB,IP
Jing Feng	29375708	Oncol Lett	WB,IF

Storage

Storage

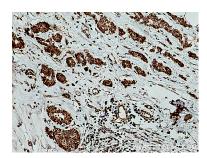
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

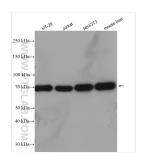
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

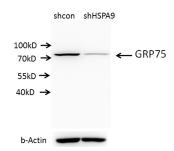
Selected Validation Data



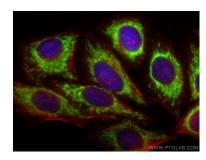
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 14887-1-AP (GRP75 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



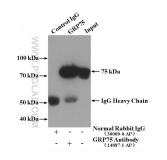
Various lysates were subjected to SDS PAGE followed by western blot with 14887-1-AP (GRP75 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



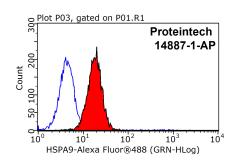
A549 cells (shcontrol and shRNA of GRP75)were subjected to SDS PAGE followed by western blot with 14887-1-AP (GRP75 antibody) at dilution of 1:500.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using GRP75 antibody (14887-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



IP result of anti-GRP75 (IP:14887-1-AP, 4ug; Detection:14887-1-AP 1:2000) with mouse brain tissue lysate 3680ug.



1X10^6 HepG2 cells were stained with 0.2ug GRP75 antibody (14887-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.