

For Research Use Only

# GRP75 Polyclonal antibody

Catalog Number: 14887-1-AP

Featured Product

34 Publications



## Basic Information

### Catalog Number:

14887-1-AP

### Size:

150ul, Concentration: 400 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6673

### GenBank Accession Number:

BC000478

### GeneID (NCBI):

3313

### UNIPROT ID:

P38646

### Full Name:

heat shock 70kDa protein 9 (mortalin)

### Calculated MW:

74 kDa

### Observed MW:

74-75 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

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

IHC 1:1000-1:4000

IF 1:200-1:800

## Applications

### Tested Applications:

WB, IP, IF, FC, IHC, ELISA

### Cited Applications:

WB, IP, IF

### 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

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

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

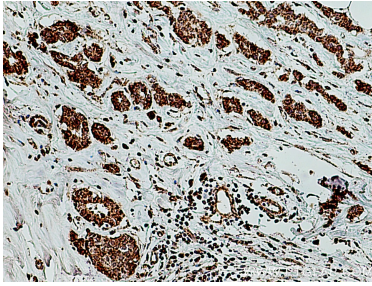
For technical support and original validation data for this product please contact:

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

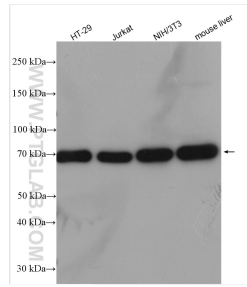
E: proteintech@ptglab.com  
W: ptglab.com

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

## Selected Validation Data



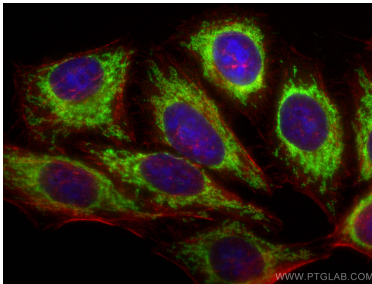
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14887-1-AP (GRP75 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



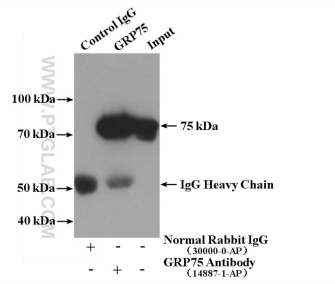
Various lysates were subjected to SDS PAGE followed by western blot with 14887-1-AP (GRP75 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



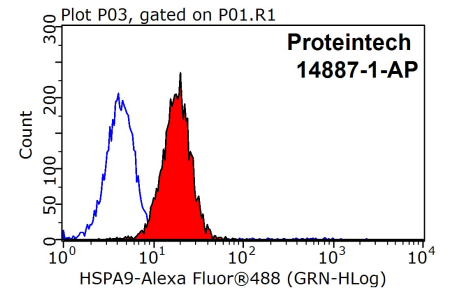
A549 cells (shcontrol and shRNA of GRP75) were subjected to SDS PAGE followed by western blot with 14887-1-AP (GRP75 antibody) at dilution of 1:500.



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<sup>6</sup> 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.