

For Research Use Only

GRP75 Polyclonal antibody

Catalog Number: 14887-1-AP

Featured Product

48 Publications



Basic Information

Catalog Number:

14887-1-AP

Size:

150ul, Concentration: 500 ug/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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:2000-1:8000

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat, zebrafish

Cited Species:

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

IP: mouse brain tissue, NIH/3T3 cells

IHC: human normal colon,

IF/ICC: 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

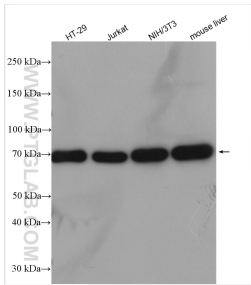
For technical support and original validation data for this product please contact:

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

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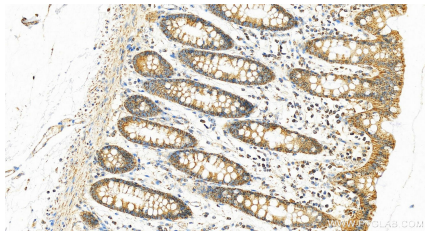
Selected Validation Data



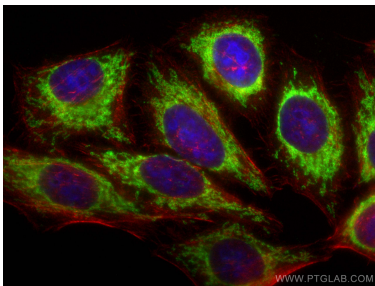
Various lysates were subjected to SDS PAGE followed by western blot with 14887-1-AP (GRP75 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



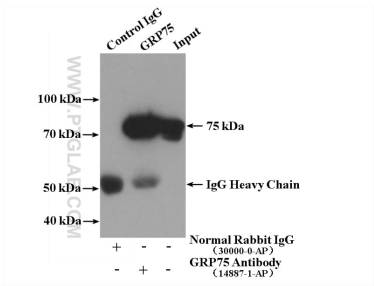
A549 cells (shcontrol and shRNA of GRP75) were subjected to SDS PAGE followed by western blot with 14887-1-AP (GRP75 antibody) at dilution of 1:500.



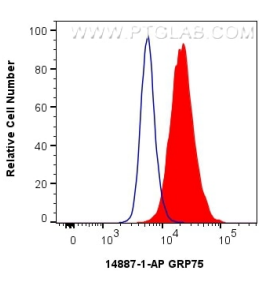
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 14887-1-AP (GRP75 antibody) at dilution of 1:4000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using GRP75 antibody (14887-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated 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.



1x10⁶ HepG2 cells were intracellularly stained with 0.2 ug GRP75 Polyclonal antibody (14887-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.2 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).