

For Research Use Only

# GAC-specific Polyclonal antibody

Catalog Number: 19958-1-AP

Featured Product

22 Publications



## Basic Information

### Catalog Number:

19958-1-AP

### Size:

150ul, Concentration: 287 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

AF158555

### GeneID (NCBI):

2744

### UNIPROT ID:

O94925

### Full Name:

glutaminase

### Calculated MW:

65 kDa

### Observed MW:

58 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

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

IHC 1:100-1:400

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, mouse

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : HEK-293 cells, A549 cells, HeLa cells

IP : mouse kidney tissue,

IHC : human heart tissue, human kidney tissue, human pancreas cancer tissue

IF/ICC : HEK-293 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Glutaminase C (GAC), a splicing variant of the kidney-type glutaminase (KGA) gene, is a vital mitochondrial enzyme protein that catalyzes glutamine to glutamate. GAC is the only isoform present in the mitochondria (PMID:22228304). In a normal state, immunodecoration with antibodies directed against GAC identified an abundant complex of 232 kDa as a tetrameric form of GAC, the DPAA can directly destructed the native tetrameric GAC complex to accumulate the unassembled one (50-90 kDa). (PMID:22493432). This antibody is specific to GAC isoform. It has no cross reaction to KGA.

## Notable Publications

Author	Pubmed ID	Journal	Application
Michael Lampa	28950000	PLoS One	WB
Polina Matre	27806325	Oncotarget	WB
Niki Marie Zacharias	29170516	Sci Rep	WB

## 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

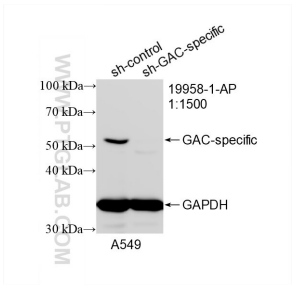
For technical support and original validation data for this product please contact:

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

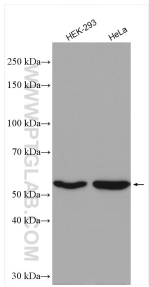
E: proteintech@ptglab.com  
W: ptglab.com

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

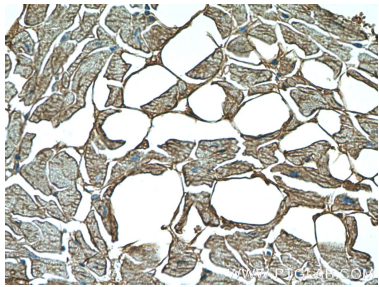
Selected Validation Data



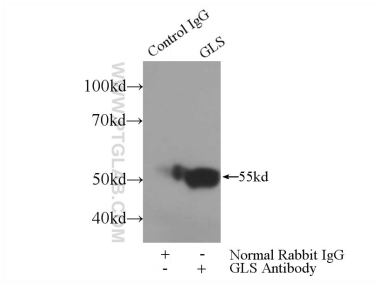
WB result of GAC-specific antibody (19958-1-AP; 1:1500; incubated at room temperature for 1.5 hours) with sh-Control and sh-GAC-specific transfected A549 cells.



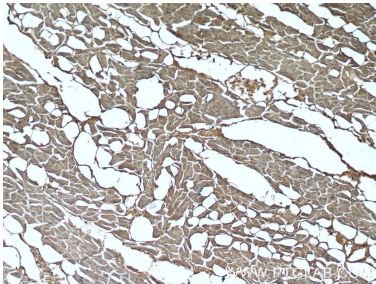
Various lysates were subjected to SDS PAGE followed by western blot with 19958-1-AP (GAC-specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



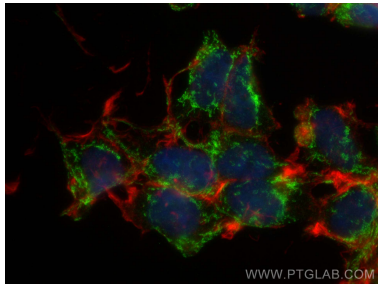
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 19958-1-AP (GAC-specific Antibody) at dilution of 1:200 (under 40x lens).



IP result of anti-GAC-specific (IP:19958-1-AP, 3ug; Detection:19958-1-AP 1:500) with mouse kidney tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 19958-1-AP (GAC-specific Antibody) at dilution of 1:200 (under 10x lens).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using GAC-specific antibody (19958-1-AP) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red).