For Research Use Only

# KGA-Specific Polyclonal antibody

Catalog Number:20170-1-AP Featured Product 14 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
20170-1-AP

Size:
150ul , Concentration: 1400 µg/ml by Nanodrop and 707 µg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG14002

GenBank Accession Number:
BC038507

GeneID (NCBI):
2744

Full Name:
glutaminase

Calculated MW:
669 aa, 73 kDa

Observed MW:
66 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
IHC 1:20-1:200
IF 1:20-1:400

## Applications

Tested Applications:
IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, IF, IHC, 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 : HEK-293 cells, mouse kidney tissue, human heart tissue, human brain tissue, K-562 cells, mouse brain tissue, HeLa cells, rat brain tissue

IP : HEK-293 cells,

IHC : human kidney tissue, human brain tissue, mouse kidney tissue

IF : HEK-293 cells,

## Background Information

GLS, also named as GLS1 and KIAA0838, belongs to the glutaminase family. It catalyzes the first reaction in the primary pathway for the renal catabolism of glutamine. Glutaminase-, glutamate-, and taurine-immunoreactive neurons develop neurofibrillary tangles in Alzheimer's disease.The glutaminase band in AA/C1 cells is more intense than in HT29 cells, in accordance with measurements of glutaminase activity, and had the same molecular mass of approx 63 kDa. The bands for both cell lines are clearly different in size from both rat liver glutaminase (58 kDa) and rat kidney glutaminase (65 kDa)(PMID:12408749). It also reveals a molecular weight of 83-84 kDa as a phosphate-dependent glutaminase(PMID:447624;7512428). It has 3 isoforms produced by alternative splicing named as KGA, GAM, GAC. This antibody is specific to KGA.

## Notable Publications

| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Daniel Herranz | 26390244 | Nat Med | WB |
| Kalpana D Acharya | 28955722 | eNeuro | WB |
| Niki Marie Zacharias | 29170516 | Sci Rep | WB |

## Storage

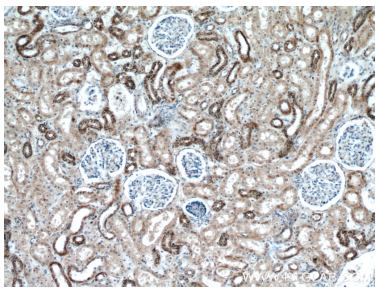
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

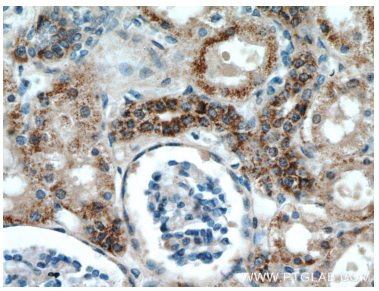
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

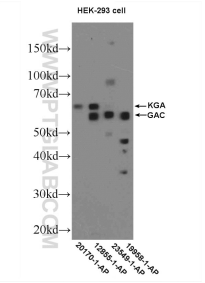
## Selected Validation Data



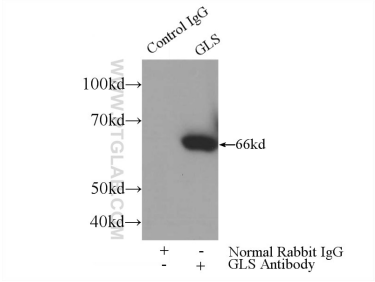
Immunohistochemical analysis of paraffin-embedded human kidney using 20170-1-AP (KGA-Specific antibody) at dilution of 1:100 (under 10x lens).



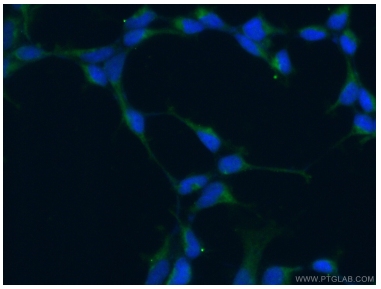
Immunohistochemical analysis of paraffin-embedded human kidney using 20170-1-AP (KGA-Specific antibody) at dilution of 1:100 (under 40x lens).



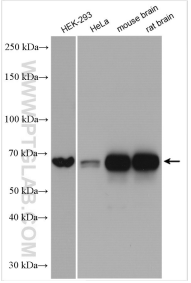

HEK-293 cells were subjected to SDS PAGE followed by western blot with 20170-1-AP (KGA-Specific antibody at dilution of 1:600 incubated at 4 degree celsius over night.




IP Result of anti-KGA-Specific (IP:20170-1-AP, 3ug; Detection:20170-1-AP 1:800) with HEK-293 cells lysate 3200ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using 20170-1-AP (KGA-Specific antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




Various lysates were subjected to SDS PAGE followed by western blot with 20170-1-AP (KGA-Specific antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.