

For Research Use Only

# KGA/GAM/GAC Polyclonal antibody

Catalog Number: 23549-1-AP

Featured Product

4 Publications



## Basic Information

**Catalog Number:**

23549-1-AP

**Size:**

750 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG20354

**GenBank Accession Number:**

BC038507

**GeneID (NCBI):**

2744

**UNIPROT ID:**

O94925

**Full Name:**

glutaminase

**Calculated MW:**

669 aa, 73 kDa

**Observed MW:**

58 kDa, 65 kDa, 83 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

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

IHC 1:20-1:200

IF/ICC 1:50-1:500

## Applications

**Tested Applications:**

WB, IP, IHC, IF/ICC, ELISA

**Cited Applications:**

WB, IHC, IF

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human

**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, HeLa cells, mouse brain tissue, mouse liver tissue, rat brain tissue

**IP:** HEK-293 cells,

**IHC:** human kidney tissue, human brain tissue

**IF/ICC:** HEK-293 cells, HeLa 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 (PMID:12408749). Ping Gao et al. (2009) determined that mitochondrial glutaminase expression (GLS, molecular mass of ~58 kDa) is increased ~10-fold in response to Myc. It also reveals a molecular weight of 83-84 kDa as a phosphate-dependent glutaminase (PMID:447624;7512428). GLS has 3 isoforms produced by alternative splicing and this antibody can recognize all the 3 isoforms (KGA, GAM, GAC) of GLS.

## Notable Publications

Author	Pubmed ID	Journal	Application
Bin Jiang	35381197	Mol Cell	WB, IF
M Ryan Smith	26774751	Redox Biol	WB
Chengmei Xiao	38994891	Adv Sci (Weinh)	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

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

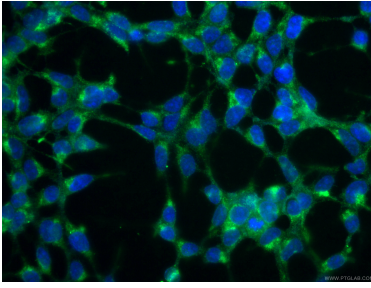
T: 4006900926

E: Proteintech-CN@ptglab.com

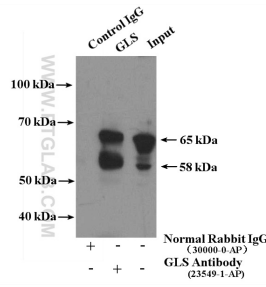
W: ptgcn.com

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

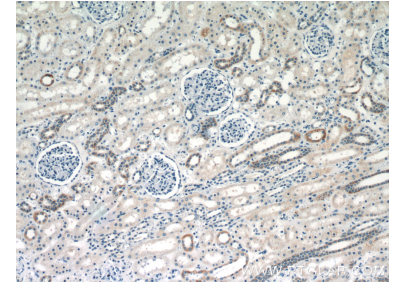
## Selected Validation Data



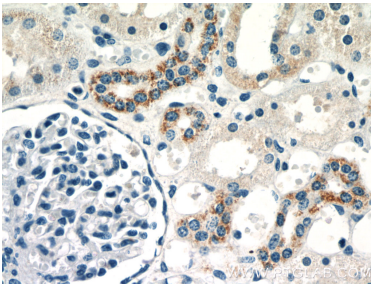
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using 23549-1-AP (KGA/GAM/GAC antibody), at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



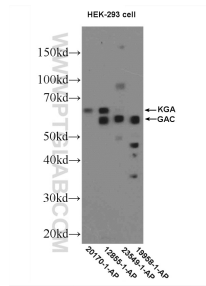
IP result of anti-KGA/GAM/GAC (IP:23549-1-AP, 4ug; Detection:23549-1-AP 1:1000) with HEK-293 cells lysate 1200ug.



Immunohistochemical analysis of paraffin-embedded human kidney slide using 23549-1-AP (KGA/GAM/GAC antibody at dilution of 1:50.



Immunohistochemical analysis of paraffin-embedded human kidney slide using 23549-1-AP (KGA/GAM/GAC antibody at dilution of 1:50.



HEK-293 cells were subjected to SDS PAGE followed by western blot with 23549-1-AP (KGA/GAM/GAC antibody at dilution of 1:600 incubated at 4 degree celsius over night.