

For Research Use Only

# KGA/GAC Monoclonal antibody

Catalog Number: 66265-1-Ig

Featured Product

15 Publications



## Basic Information

Catalog Number:

66265-1-Ig

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG24227

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

Purification Method:

Protein A purification

CloneNo.:

3A12A1

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:50-1:500

IF-P: 1:50-1:500

IF/ICC: 1:400-1:1600

## Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat, pig

Cited Species:

human, 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: NIH/3T3 cells, rat liver tissue, fetal human brain tissue, U-251 cells, HEK-293 cells

IHC: human gliomas tissue, mouse brain tissue

IF-P: mouse brain tissue,

IF/ICC: HeLa cells, HepG2 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 (PMID:1672808). 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 named as KGA, GAM, GAC. This antibody can recognize KGA and GAC.

## Notable Publications

Author	Pubmed ID	Journal	Application
Bin Jiang	35381197	Mol Cell	WB, IF
Yifan Feng	35345831	Oxid Med Cell Longev	IF
Tokio Terado	35894141	Int J Oncol	WB

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

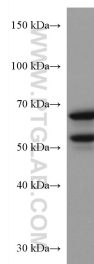
T: 4006900926

E: Proteintech-CN@ptglab.com

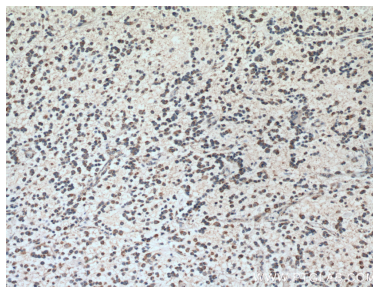
W: ptgcn.com

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

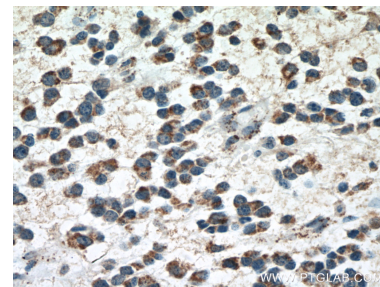
## Selected Validation Data



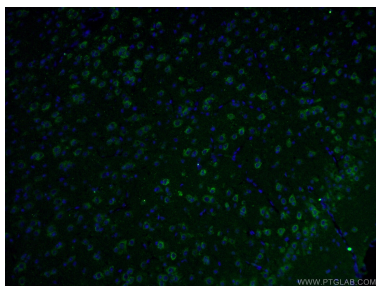
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 66265-1-Ig (GLS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



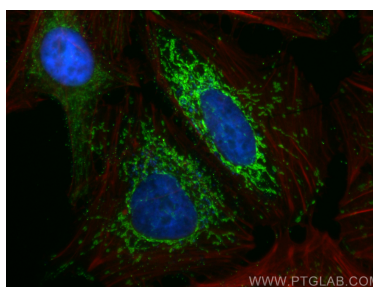
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66265-1-Ig (GLS antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66265-1-Ig (GLS antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 66265-1-Ig (GLS antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using KGA/GAC antibody (66265-1-Ig, Clone: 3A12A1 ) at dilution of 1:800 and Coralite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).