

For Research Use Only

# KGA/GAC Monoclonal antibody

Catalog Number: 66265-1-Ig

Featured Product

11 Publications



## Basic Information

<b>Catalog Number:</b> 66265-1-Ig	<b>GenBank Accession Number:</b> BC038507	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1900 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 2744	<b>CloneNo.:</b> 3A12A1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O94925	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:50-1:500 IF-P 1:50-1:500 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG2b	<b>Full Name:</b> glutaminase	
<b>Immunogen Catalog Number:</b> AG24227	<b>Calculated MW:</b> 669 aa, 73 kDa	
	<b>Observed MW:</b> 58 kDa, 65 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, ELISA	<b>Positive Controls:</b> <b>WB:</b> NIH/3T3 cells, rat liver tissue, fetal human brain tissue, U-251 cells, HEK-293 cells <b>IHC:</b> human gliomas tissue, mouse brain tissue <b>IF-P:</b> mouse brain tissue, <b>IF/ICC:</b> HeLa cells, HepG2 cells
<b>Cited Applications:</b> WB, IHC, IF	
<b>Species Specificity:</b> human, mouse, rat, pig	
<b>Cited Species:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

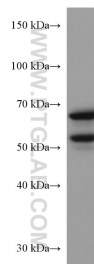
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

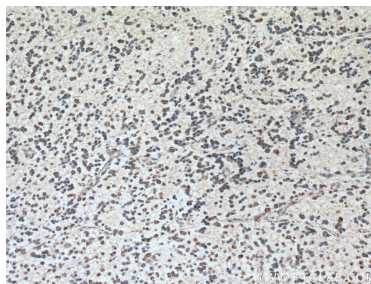
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

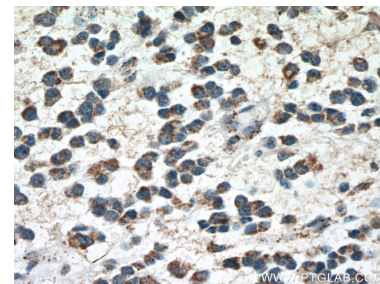
## Selected Validation Data



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.



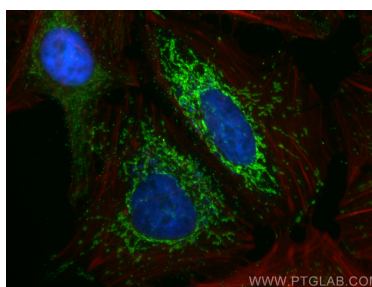
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66265-1-Ig (GLS antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).