

For Research Use Only

# KGA/GAC Recombinant antibody, PBS Only

Catalog Number: 81486-1-PBS

Featured Product



## Basic Information

<b>Catalog Number:</b> 81486-1-PBS	<b>GenBank Accession Number:</b> BC038507	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2744	<b>CloneNo.:</b> 4C20
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O94925	
<b>Isotype:</b> IgG	<b>Full Name:</b> glutaminase	
<b>Immunogen Catalog Number:</b> AG3505	<b>Calculated MW:</b> 669 aa, 73 kDa	
	<b>Observed MW:</b> 58 kDa, 65 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## 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.

## Storage

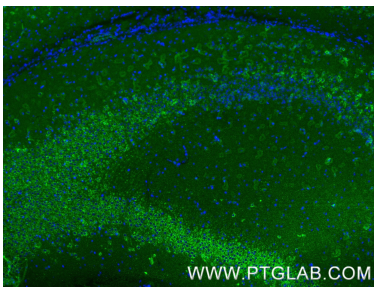
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

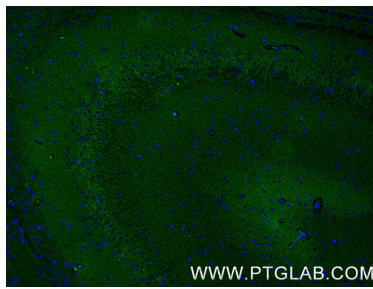
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

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

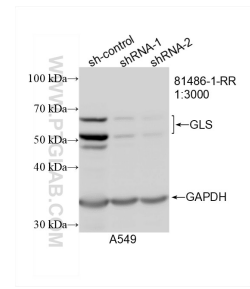
## Selected Validation Data



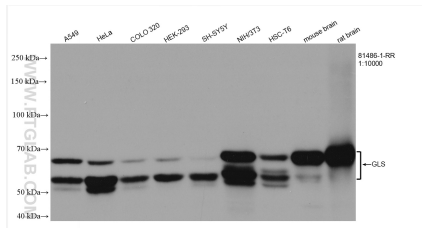
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using KGA/GAC antibody (81486-1-RR, Clone: 4C20) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81486-1-PBS in a different storage buffer formulation.



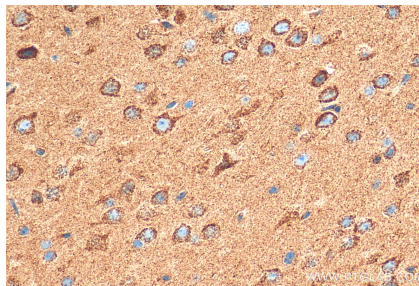
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using KGA/GAC antibody (81486-1-RR, Clone: 4C20) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81486-1-PBS in a different storage buffer formulation.



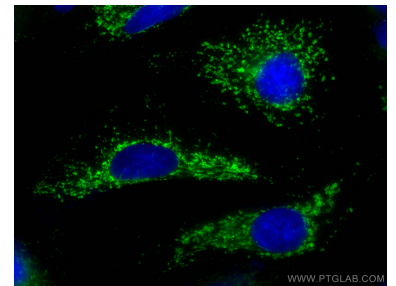
WB result of GLS antibody (81486-1-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-GLS transfected A549 cells. This data was developed using the same antibody clone with 81486-1-PBS in a different storage buffer formulation.



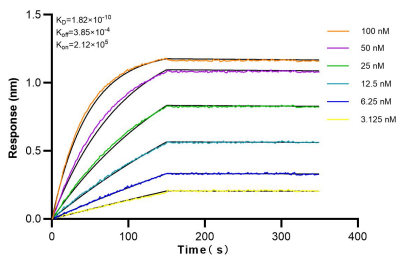
Various lysates were subjected to SDS PAGE followed by western blot with 81486-1-RR (GLS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81486-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 81486-1-RR (GLS antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81486-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using GLS antibody (81486-1-RR, Clone: 4C20) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 81486-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81486-1-RR against Human GLS were performed. The affinity constant is 0.182 nM.