

For Research Use Only

KGA/GAC Recombinant antibody

Catalog Number: 81486-1-RR

Featured Product

3 Publications



Basic Information

Catalog Number:

81486-1-RR

Size:

100ul, Concentration: 1000 ug/ml by 2744

Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3505

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.:

4C20

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:200-1:800

IF-P 1:200-1:800

IF/ICC 1:500-1:2000

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human

Positive Controls:

WB : A549 cells,

IHC : mouse brain tissue,

IF-P : rat brain tissue, mouse brain tissue

IF/ICC : A549 cells,

Note-IHC: suggested antigen retrieval with *TE buffer pH 9.0*; (*) Alternatively, antigen retrieval may be performed with *citrate buffer pH 6.0*

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
Zarina Brune	39253451	bioRxiv	WB
Ranran Yan	38501098	Front Endocrinol (Lausanne)	IHC
Tiantian Zhou	38058838	Am J Cancer Res	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

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

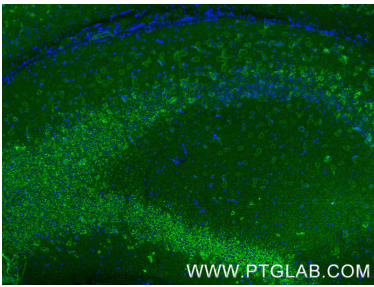
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

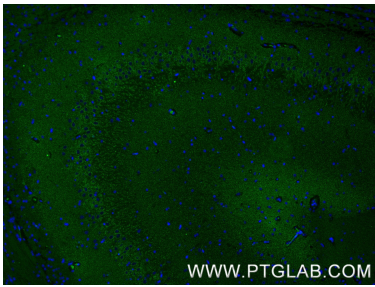
E: proteintech@ptglab.com
W: ptglab.com

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

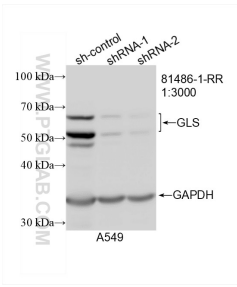
Selected Validation Data



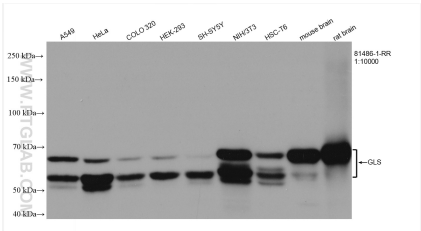
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using KGA/GAC antibody (81486-1-RR, Clone: 4C20) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



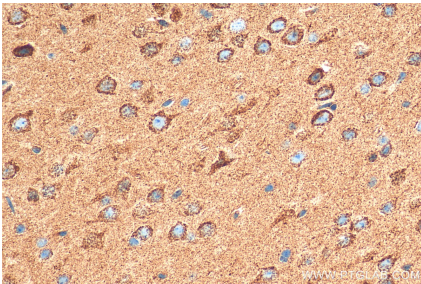
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using KGA/GAC antibody (81486-1-RR, Clone: 4C20) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



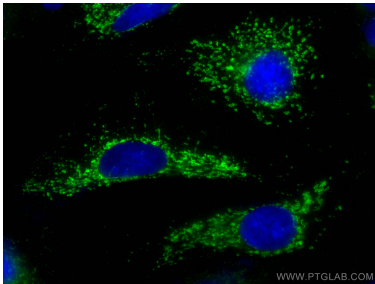
WB result of GLS antibody (81486-1-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-GLS transfected A549 cells.



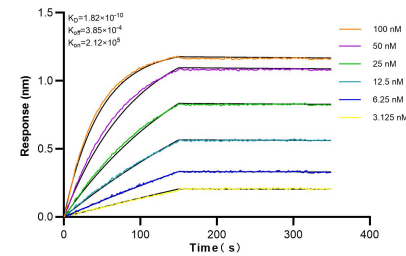
Various lysates were subjected to SDS PAGE followed by western blot with 81486-1-RR (GLS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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).



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).



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