

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:

150ul, Concentration: 750 ug/ml by Nanodrop and 493 ug/ml by Bradford method using BSA as the standard;

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 ug 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, IHC, IF/ICC, IP, 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

*** 20ul sizes contain 0.1% BSA

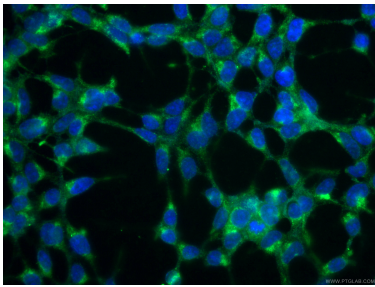
For technical support and original validation data for this product please contact:

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

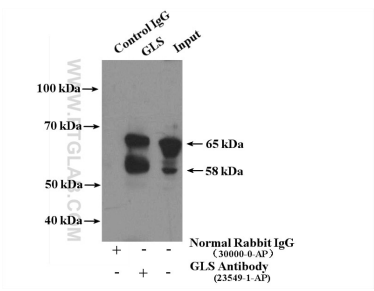
E: proteintech@ptglab.com
W: ptglab.com

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

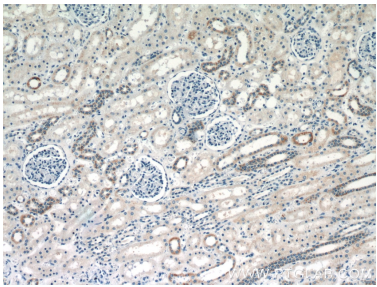
Selected Validation Data



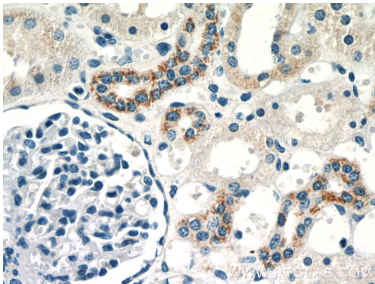
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using 23549-1-AP (KGA/GAM/GAC antibody), at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



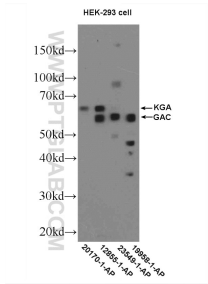
IP result of anti-KGA/GAM/GAC (IP:23549-1-AP, 4ug; Detection:23549-1-AP 1:1000) with HEK-293 cells lysate 1200ug.



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.