For Research Use Only

KGA-Specific Monoclonal antibody

Catalog Number:66265-2-lg 1 Publications



Basic Information

Catalog Number: GenBank Accession Number:

66265-2-lg BC038507 GeneID (NCBI): Size:

150ul, Concentration: 1400 ug/ml by 2744 Nanodrop and 1000 ug/ml by $Bradford_{\mbox{UNIPROT ID}}$: method using BSA as the standard; 094925

Full Name: Mouse glutaminase Isotype: Calculated MW: lgG1 669 aa, 73 kDa Immunogen Catalog Number: Observed MW:

AG24227 65 kDa

Tested Applications:

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

Cited Applications:

WB. IF

Source:

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

Purification Method:

Protein G purification

CloneNo.: 1B11A11

Recommended Dilutions:

WB: 1:5000-1:50000 IHC: 1:1000-1:4000 IF-P: 1:200-1:800 IF/ICC: 1:200-1:800

Applications

Positive Controls:

WB: mouse brain tissue, HEK-293 cells, COLO 320

cells, HSC-T6 cells, NIH/3T3 cells

IHC: mouse brain tissue, IF-P: mouse brain tissue, IF/ICC: A549 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. 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 produced by alternative splicing named as KGA, GAM, GAC. This antibody is specific to KGA.

Notable Publications

Author	Pubmed ID	Journal	Application
Sijia Fang	40204725	Cell Death Discov	WB,IF

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

*** 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.

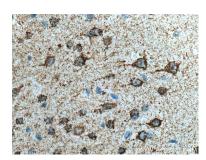
Selected Validation Data



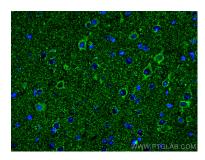
mouse brain tissue were subjected to SDS PAGE followed by western blot with 66265-2-1g (GLS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



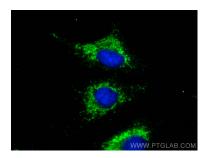
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 66265-2-Ig (GLS antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 66265-2-Ig (GLS antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using KGA-Specific antibody (66265-2-lg, Clone: 1B11A11) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using KGA-Specific antibody (66265-2-lg, Clone: 1B11A11) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).