

For Research Use Only

# KGA-Specific Monoclonal antibody

Catalog Number: 66265-2-Ig



## Basic Information

|                           |            |                           |                |                        |                        |
|---------------------------|------------|---------------------------|----------------|------------------------|------------------------|
| Catalog Number:           | 66265-2-Ig | GenBank Accession Number: | BC038507       | Purification Method:   | Protein G purification |
| Size:                     | 1400 ug/ml | GeneID (NCBI):            | 2744           | CloneNo.:              | 1B11A11                |
| Source:                   | Mouse      | UNIPROT ID:               | O94925         | Recommended Dilutions: | WB 1:5000-1:50000      |
| Isotype:                  | IgG1       | Full Name:                | glutaminase    |                        | IHC 1:1000-1:4000      |
| Immunogen Catalog Number: | AG24227    | Calculated MW:            | 669 aa, 73 kDa |                        | IF-P 1:200-1:800       |
|                           |            | Observed MW:              | 65 kDa         |                        | IF/ICC 1:200-1:800     |

## Applications

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

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

**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 :** 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.

## 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

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

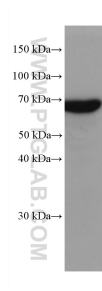
T: 4006900926

E: Proteintech-CN@ptglab.com

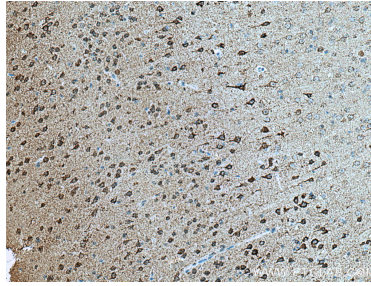
W: ptgcn.com

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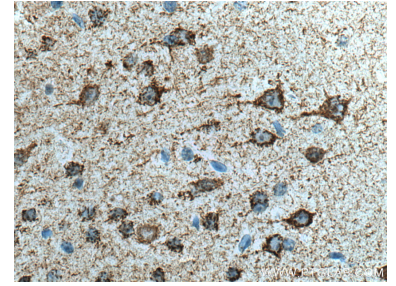
## Selected Validation Data



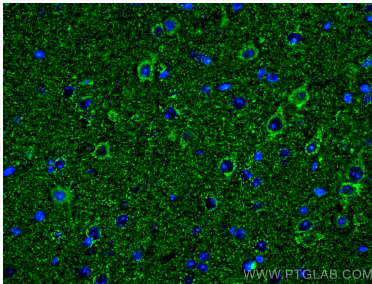
mouse brain tissue were subjected to SDS PAGE followed by western blot with 66265-2-Ig (GLS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



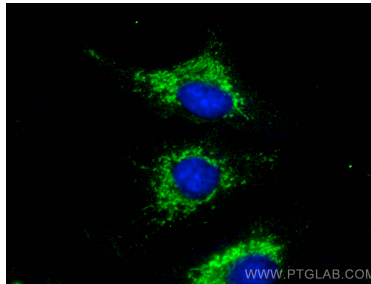
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66265-2-Ig (GLS antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded 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-Ig, Clone: 1B11A11) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



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