# Recombinant Glutamine Synthetase / GLUL Antibody

Rabbit Monoclonal Antibody [Clone GLUL/8996R]

| Catalog No | Format | Size |
|---|---|---|
| 2752-RBM25-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 2752-RBM25-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 2752-RBM25-P1ABX | Purified Ab WITHOUT BSA or Azide at 1.0mg/ml | 100 ug |

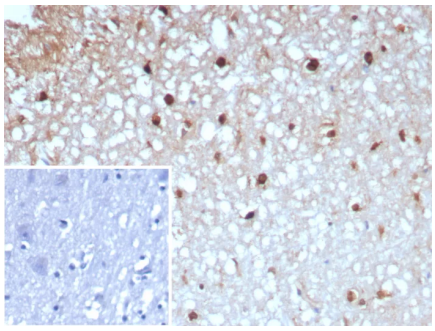
| Applications | Tested Dillution | Note |
|---|---|---|
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB) | 2-4ug/ml | |

## Product Details

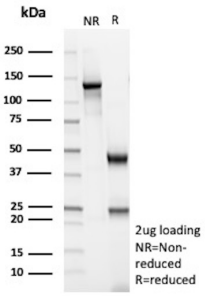
| | |
|---|---|
| **Clone** | GLUL/8996R |
| **Immunogen** | Recombinant fragment (around aa84-213) of the human Glutamine Synthetase protein (exact sequence is proprietary) |
| **Host** | Rabbit |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG / Kappa |
| **Mol. Weight of Antigen** | 42.06kDa |
| **Cellular Localization** | Cell membrane, Cytoplasm, Cytosol, Microsome, Mitochondrion |
| **Species Reactivity** | Human |
| **Positive Control** | Y79 cells. Human brain, stomach or thyroid. Liver, HeLa, Jurkat, Brain |

**Optimal dilution for a specific application should be determined.*

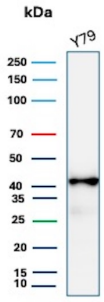
## Product Images for Recombinant Glutamine Synthetase / GLUL Antibody



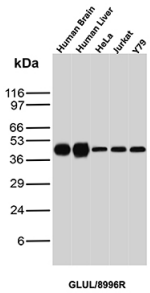
Formalin-fixed, paraffin-embedded human brain stained with GLUL Recombinant Rabbit Monoclonal Antibody (GLUL/8996R). Inset: PBS instead of primary antibody; secondary only negative control.



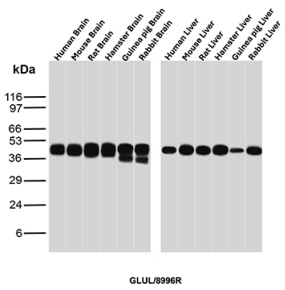

SDS-PAGE Analysis of Purified GLULRecombinant Rabbit MonoclonalAntibody (GLUL/8996R). Confirmation of Purity and Integrity of Antibody.



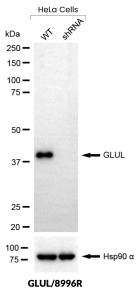

Western blot analysis of Y79 cell lysate using Glutamine Synthetase Recombinant Rabbit Monoclonal Antibody (GLUL/8996R).



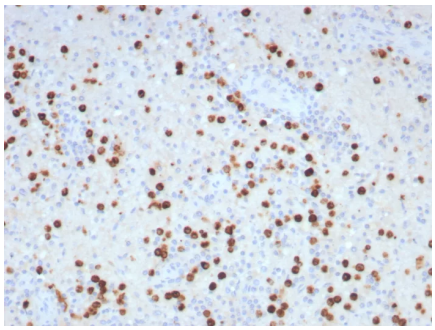

Western blot analysis of Human Brain, Human Liver, HeLa, Jurkat and Y79 lysates using Glutamine Synthetase Recombinant Rabbit Monoclonal Antibody (GLUL/8996R).




Western Blot analysis of Human Brain, Mouse Brain, Rat Brain, Hamster Brain, Guinea pig Brain, Rabbit Brain, Human Liver, Mouse Liver, Rat Liver, Hamster Liver, Guinea pig Liver, and Rabbit Liver tissue lysates using GLUL Recombinant Rabbit Monoclonal Antibody (GLUL/8996R).




Western Blot validation of anti-GLUL antibody. GLUL protein expression was compared in wild-type (WT) and GLUL shRNA Knockdown (KD) HeLa cells (30ug of total protein). Loading control is shown below.



Formalin-fixed, paraffin-embedded human brain stained with GLUL Recombinant Rabbit Monoclonal Antibody (GLUL/8996R). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

## Specificity & Comments

Glutamine synthetase (Gl Syn) forms a homo-octamer that serves as a catalyst for the amination of glutamic acid to form glutamine. This enzyme is a marker for astrocytes, which serve as the primary site of conversion of glutamic acid to glutamine in the brain. Induction of glutamine synthetase is seen upon astrocyte cell contact with neurons. Elevated expression of glutamine synthetase in glial cells has been shown to protect neurons from degeneration due to excess glutamate. Glutamine synthetase is also present in the liver and is involved in nitrogen homeostasis. Overexpression of glutamine synthetase has been shown in primary liver cancers, indicating a potential role for glutamine synthetase in hepatocyte transformation.

## Supplied As

200ug/ml of Ab produced in a mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Limitations and Warranty



2 Union Square, Union City, CA 94587, Tel: 1-866-2-NEOBIO (1-866-263-6246)
orders@NeoBiotechnologies.com, www.NeoBiotechnologies.com

NeoBiotechnologies
Your Partner in Proteome Research