

## Recombinant Glutamine Synthetase / GLUL Antibody

Mouse Monoclonal Antibody [Clone rGLUL/8621]

Catalog No	Format	Size
2752-MSM23-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
2752-MSM23-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2752-MSM23-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

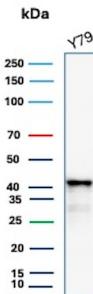
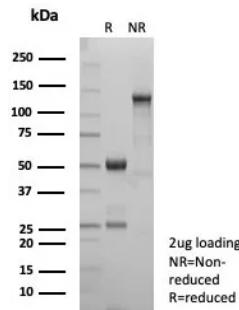
Applications	Tested Dilution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

Clone	rGLUL/8621
Gene Name	GLUL
Immunogen	Recombinant fragment (around aa 1-200) of human GLUL protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	42kDa
Cellular Localization	Cytoplasm. Mitochondrion.
Species Reactivity	Guinea Pig, Hamster, Human, Mouse, Rabbit, Rat
Positive Control	Human Liver or Human Brain or Y79

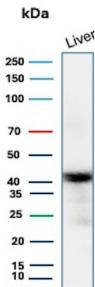
\*Optimal dilution for a specific application should be determined.

### Product Images for Recombinant Glutamine Synthetase / GLUL Antibody

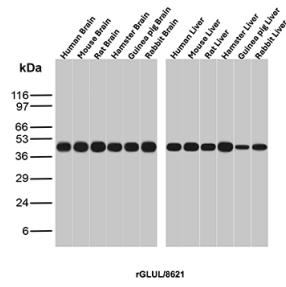


SDS-PAGE Analysis of Purified GLUL Recombinant Mouse Monoclonal Antibody (rGLUL/8621). Confirmation of Purity and Integrity of Antibody.

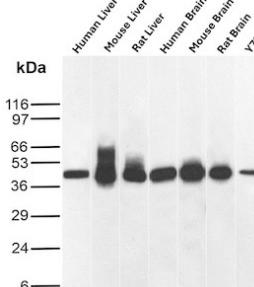
Western blot analysis of Y79 cell lysate using Glutamine Synthetase Recombinant Mouse Monoclonal Antibody (rGLUL/8621).



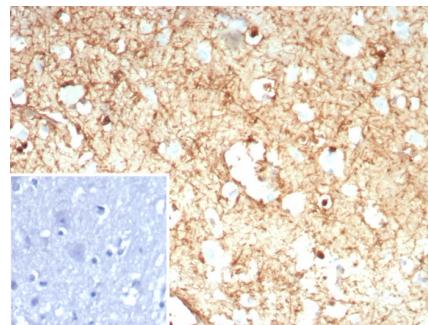
Western blot analysis of human liver lysate using Glutamine Synthetase Recombinant Mouse Monoclonal Antibody (rGLUL/8621).



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 Glutamine Synthetase Recombinant Mouse Monoclonal Antibody (rGLUL/8621).



Western blot analysis of Human Liver, Mouse Liver, Rat Liver, Human Brain, Mouse Brain, Rat Brain and Y79 lysates using Glutamine Synthetase Recombinant Mouse Monoclonal Antibody (rGLUL/8621).



Formalin-fixed, paraffin-embedded human brain stained with GLUL Recombinant Mouse Monoclonal Antibody (rGLUL/8621). Inset: PBS instead of primary antibody; secondary only negative control.

## 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.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. 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.

## Research Areas

Cardiovascular, Mitochondria Marker, Neuroinflammation