

# **Glutamine Synthetase / GLUL Antibody**

Mouse Monoclonal Antibody [Clone GLUL/6601]

Catalog No	Format		Size
2752-MSM11-P0	Purified Ab with BSA and Azide a	t 200ug/ml	20 ug
2752-MSM11-P1	Purified Ab with BSA and Azide a	t 200ug/ml	100 ug
2752-MSM11-P1ABX	Purified Ab WITHOUT BSA and A	zide 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/6601
Gene Name	GLUL
Immunogen	Recombinant fragment (around aa 50-250) of human GLUL protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	42kDa
Cellular Localization	Cytoplasm. Mitochondrion.
Species Reactivity	Cat, Dog, Horse, Human
Positive Control	Human brain stomach or thyroid. A-431 or Y79 cells.

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

# Product Images for Glutamine Synthetase / GLUL Antibody



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Formalin-fixed, paraffin-embedded dog liver stained with Glutamine Synthetase Mouse Monoclonal Antibody (GLUL/6601). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min. Western blot analysis of human brain lysate using Glutamine SynthetaseMouse Monoclonal Antibody (GLUL/6601).





Formalin-fixed, paraffin-embedded human stomach stained with GlutamineSynthetase Mouse Monoclonal Antibody (GLUL/6601) at 2ug/ml. 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.

## **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  $8^{\circ}$ 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

#### **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.

