

# Human Glutamine Synthetase antibody

Catalog Number: ATGA0474

## PRODUCT INFORMATION

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**Catalog number**

ATGA0474

**Clone No.**

AT8D7

**Product type**

Monoclonal Antibody

**UnitProt No.**

P15104

**NCBI Accession No.**

NP\_001028216

**Alternative Names**

Glutamine synthase, Glutamate-ammonia ligase, GLNS, Glutamate-ammonia ligase, GS, Palmitoyltransferase  
GLUL

## PRODUCT SPECIFICATION

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human GLUL (1-373aa) purified from E. coli

**Isotype**

IgG1 kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB, ICC/IF

**Usage**

The antibody has been tested by ELISA, Western blot analysis and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

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## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

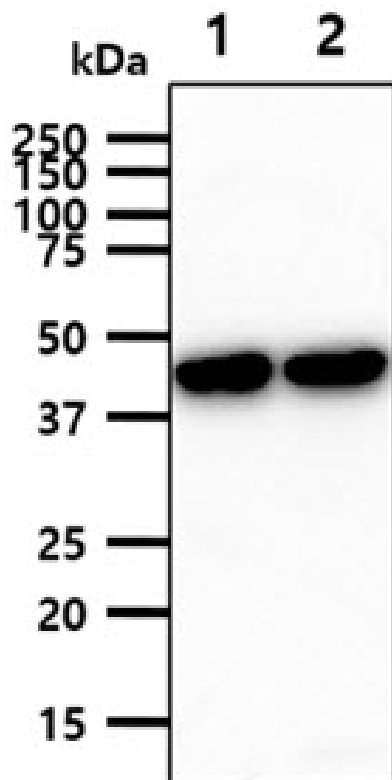
Glutamine synthetase (GLUL), which is therefore able to regulate intracellular concentrations of glutamate. GLUL catalyzes the synthesis of glutamine from glutamate and ammonia. Glutamine is a main source of energy and is involved in cell proliferation, inhibition of apoptosis, and cell signaling. GLUL is essential for proliferation of fetal skin fibroblasts and plays an important role in controlling body pH by removing ammonia from circulation. Mutations in GLUL are associated with congenital glutamine deficiency.

### General References

Vermeulen T., et al, (2008) Arch Biochem Biophys. 478: 96-102.  
Liaw SH., et al. (1995) Protein Sci. 4(11): 2358-65.

## DATA

### Western blot analysis (WB)

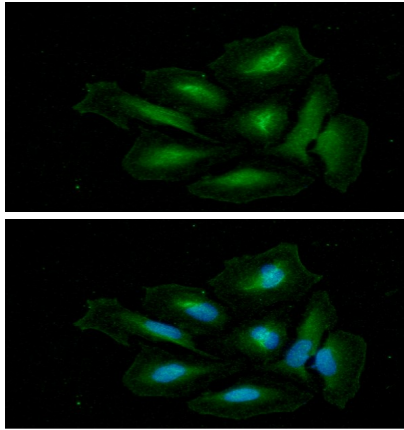


The mouse tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human GLUL antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.  
Lane 1.: Mouse brain tissue lysate  
Lane 2.: Mouse liver tissue lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

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ICC/IF analysis of GLUL in HeLa cells. The cell was stained with ATGA0474 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).