

GLUL Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6892a**Specification**

GLUL Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P15104](#)**GLUL Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 2752**Other Names**

Glutamine synthetase, GS, Glutamate decarboxylase, Glutamate--ammonia ligase, GLUL, GLNS

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6892a](/products/AP6892a) was selected from the N-term region of human GLUL. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GLUL Antibody (N-term) Blocking Peptide - Protein Information**Name** GLUL {ECO:0000303|PubMed:30158707, ECO:0000312|HGNC:HGNC:4341}**Function**

Glutamine synthetase that catalyzes the ATP-dependent conversion of glutamate and ammonia to glutamine (PubMed: [30158707](http://www.uniprot.org/citations/30158707), PubMed: [16267323](http://www.uniprot.org/citations/16267323)). Its role depends on tissue localization: in the brain, it regulates the levels of toxic ammonia and converts neurotoxic glutamate to harmless glutamine, whereas in the liver, it is one of the enzymes responsible for the removal of ammonia (By similarity). Essential for proliferation of fetal skin fibroblasts (PubMed: [18662667](http://www.uniprot.org/citations/18662667)). Independently of its glutamine synthetase activity, required for endothelial cell migration during vascular development: acts by regulating membrane localization and activation of the GTPase RHOJ, possibly by promoting RHOJ palmitoylation (PubMed: [30158707](http://www.uniprot.org/citations/30158707)). May act as a

palmitoyltransferase for RHOJ: able to autopalmitoylate and then transfer the palmitoyl group to RHOJ (PubMed:30158707). Plays a role in ribosomal 40S subunit biogenesis (PubMed:26711351).

Cellular Location

Cytoplasm, cytosol. Microsome {ECO:0000250|UniProtKB:P09606}. Mitochondrion {ECO:0000250|UniProtKB:P09606}. Cell membrane; Lipid-anchor. Note=Mainly localizes in the cytosol, with a fraction associated with the cell membrane

Tissue Location

Expressed in endothelial cells.

GLUL Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GLUL Antibody (N-term) Blocking Peptide - Images**GLUL Antibody (N-term) Blocking Peptide - Background**

GLUL belongs to the glutamine synthetase family. It 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 Antibody (N-term) Blocking Peptide - References

Di Tommaso,L., et.al., J. Hepatol. 50 (4), 746-754 (2009)