

**GS**  
**Mouse Monoclonal antibody(Mab)**  
**Catalog # AD80411**

## Specification

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### GS - Product info

Application	IHC-P, IHC
Primary Accession	<a href="#">P15104</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	42064

### GS - Additional info

Gene ID	2752
Gene Name	GLUL {ECO:0000303 PubMed:30158707, ECO:0000312 HGNC:HGNC:4341}

#### Other Names

Glutamine synthetase, GS, 6.3.1.2, Glutamate--ammonia ligase, Palmitoyltransferase GLUL, 2.3.1.225, GLUL {ECO:0000303|PubMed:30158707, ECO:0000312|HGNC:HGNC:4341}

#### Dilution

IHC-P~~Ready-to-use  
IHC~~Ready-to-use

Storage	<b>This product is stored at 2-8 °C, please use it within the expiration date.</b>
Precautions	<b>Glutamine Synthetase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.</b>

### GS - Protein Information

**Name** GLUL {ECO:0000303|PubMed:30158707, ECO:0000312|HGNC:HGNC:4341}

Function	<b>Glutamine synthetase that catalyzes the ATP-dependent conversion of glutamate and ammonia to glutamine (PubMed:<a href="#">30158707</a>, PubMed:<a href="#">16267323</a>). 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:<a href="#">18662667</a>). Independently of its</b>
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Cellular Location

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](#)). May act as a palmitoyltransferase for RHOJ: able to autopalmitoylate and then transfer the palmitoyl group to RHOJ (PubMed:[30158707](#)).

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  
Expressed in endothelial cells.

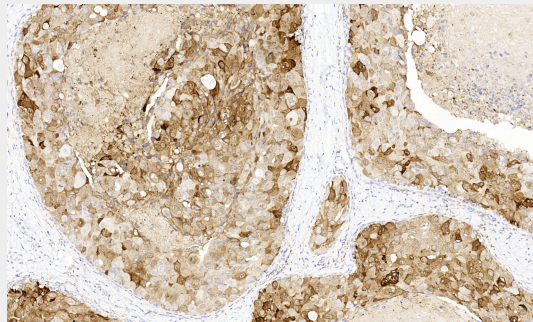
Tissue Location

### GS - Protocols

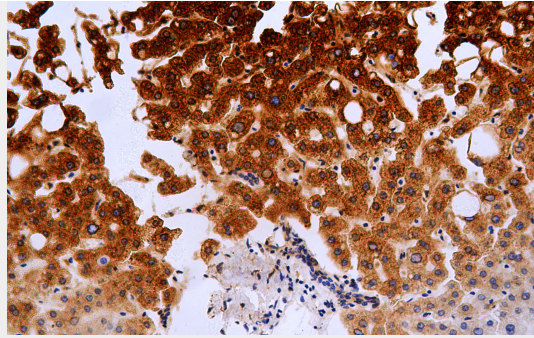
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GS - Images



Breast duct carcinoma



Immunohistochemical analysis of paraffin-embedded human liver tissue using AD80411 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.