



GS

Mouse Monoclonal antibody(Mab) Catalog # AD80411

Specification

GS - Product info

Application IHC-P Primary Accession P15104 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

Storage

Maintain refrigerated at 2-8°C

Precautions Glutamine Synthetase Antibody is for

research use only and not for use in

diagnostic or therapeutic procedures.

GS - Protein Information

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

Function Glutamine synthetase that catalyzes the

ATP-dependent conversion of glutamate

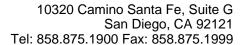
and ammonia to glutamine

(PubMed: 30158707, PubMed: 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). Independently of its





Cellular Location

Tissue 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

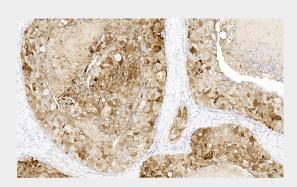
Expressed in endothelial cells.

GS - Protocols

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

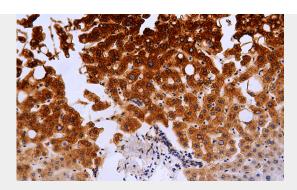
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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. AmpSeeTM Detection Systems Abcepta: AR005 was used as the secondary antibody.