

## Glutamine Synthetase Rabbit mAb

**Catalog # AP74913** 

#### **Specification**

## Glutamine Synthetase Rabbit mAb - Product Information

**Application Primary Accession** Reactivity Host Clonality

WB P15104 Mouse. Rat Rabbit **Monoclonal Antibody** 

42064

## Glutamine Synthetase Rabbit mAb - Additional Information

**Gene ID 2752** 

Calculated MW

**Other Names GLUL** 

Dilution WB~~1/500-1/1000

**Format** Liquid

#### Glutamine Synthetase Rabbit mAb - 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: <a href="http://www.uniprot.org/citations/16267323"

target=" blank">16267323</a>, PubMed:<a href="http://www.uniprot.org/citations/30158707" target="blank">30158707</a>, PubMed:<a href="http://www.uniprot.org/citations/36289327" target="blank">36289327</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

 $href="http://www.uniprot.org/citations/18662667"\ target="\_blank">18662667</a>).$ 

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: <a

href="http://www.uniprot.org/citations/30158707" target=" blank">30158707</a>). May act as a palmitoyltransferase for RHOJ: able to autopalmitoylate and then transfer the palmitoyl group to RHOJ (PubMed:<a href="http://www.uniprot.org/citations/30158707"

target=" blank">30158707</a>). Plays a role in ribosomal 40S subunit biogenesis (PubMed:<a href="http://www.uniprot.org/citations/26711351" target="\_blank">26711351</a>). Through the interaction with BEST2, inhibits BEST2 channel activity by affecting the gating at the aperture in





the absence of intracellular L-glutamate, but sensitizes BEST2 to intracellular L-glutamate, which promotes the opening of BEST2 and thus relieves its inhibitory effect on BEST2 (PubMed:<a href="http://www.uniprot.org/citations/36289327" target="\_blank">36289327</a>).

#### **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**

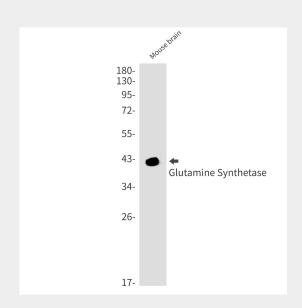
Expressed in endothelial cells.

# **Glutamine Synthetase Rabbit mAb - Protocols**

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

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

# Glutamine Synthetase Rabbit mAb - Images





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