

## Summary

Glutamine Synthetase (14W15) Rabbit Monoclonal Antibody	
Rabbit Monoclonal Antibody	
Rabbit	
WB	
Human,Mouse,Rat	

### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

## Immunogen

Gene Name	GLUL {ECO:0000303 PubMed:30158707, ECO:0000312 HGNC:HGNC:4341}
Alternative Names	GLNA; GS; GLUL; GLNS; PIG43 ; PIG59; Glutamine synthetase;
Gene ID	2752.0
SwissProt ID	P15104.A synthetic peptide of human Glutamine Synthetase

## Application

Dilution Ratio	WB: 1:1000-1:5000
Molecular Weight	42kDa

# Background

# Product Name: Glutamine Synthetase (14W15) Rabbit Control Cont

The protein encoded by this gene 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. This gene is expressed during early fetal stages, and plays an important role in controlling body pH by removing ammonia from circulation. Glutamine synthetase that catalyzes the ATP-dependent conversion of glutamate and ammonia to glutamine (PubMed: <a href="http://www.uniprot.org/citations/30158707" target=" blank">30158707</a>, PubMed: <a href="http://www.uniprot.org/citations/16267323" target=" blank">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="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>).

## **Research Area**

## Image Data



Western blot detection of Glutamine Synthetase in Rat Brain lysates using Glutamine Synthetase antibody(1:1000 diluted).

#### Note

For research use only.