

# Recombinant human Glutamine synthetase/GLUL protein

Catalog Number: ATGP0625

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-373aa

### UniProt No.

P15104

### NCBI Accession No.

NP\_001028216

### Alternative Names

Glutamine synthase, Glutamate-ammonia ligase, GLNS, Glutamate-ammonia ligase, GS, Palmitoyltransferase  
GLUL

## PRODUCT SPECIFICATION

---

### Molecular Weight

44.2 kDa (393aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 5mM DTT, 200mM NaCl

### Purity

> 90% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

Glutamine synthetase (GLuL), which is therefore able to regulate intracellular concentrations of glutamate. GLuL 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 is essential for proliferation of fetal skin fibroblasts and plays an important role in controlling body pH by removing ammonia from circulation. Mutations in GLuL are associated with congenital glutamine deficiency. Recombinant GLuL protein, fused to His-

# Recombinant human Glutamine synthetase/GLUL protein

Catalog Number: ATGP0625

tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MTTSSASSHLN KGIKQVYMSL PQGEKVQAMY IWIDGTGEGE RCKTRTL DSE PKCVEELPEW  
NFDGSSTLQS EGSNSDMYLV PAAMFRDPFR KDPNKLVLCE VFKYNRRPAE TNLRHTCKRI MDMVSNQHPW FGMEQEYTLM  
GTDGHPFGWP SNGFPGPQGP YYCGVGADRA YGRDIVEAHY RACLYAGVKI AGTNAEVMPA QWEFQIGPCE  
GISMGDHLWV ARFILHRVCE DFGVIATFDP KPIPGNWNGA GCHTNFSTKA MREENGLKYI EEAIEKLSKR HQYHIRAYDP  
KGGLDNARRL TGFHETSNIN DFSAGVANRS ASIRIPRTVG QEKKGYFEDR RPSANCDPFS VTEALIRTCL LNETGDEPFQ YKN

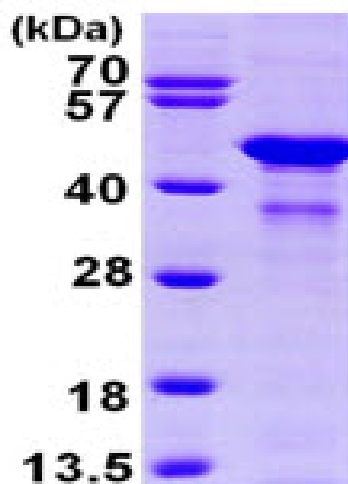
## General References

Vermeulen T., et al, (2008) Arch Biochem Biophys. 478:96-102

Liaw SH., et al. (1995) Protein Sci. 4 (11): 2358-65.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)