

## Glutamine Synthetase Active Protein | GLUL active protein

Recombinant Human Glutamine Synthetase, His Tag, Active

CATALOG #  
**AAA39145**

HOST  
**E Coli**

### PRODUCT SYNONYMS

Glutamine Synthetase; Recombinant Human Glutamine Synthetase; His Tag; Active; GLUL Human; His Active; GLNS; EC 6.3.1.2; EC 4.1.1.15; GLUL; GS; Glutamate decarboxylase; Glutamate--ammonia ligase; PIG43; PIG59; Glutamine Synthetase Human Recombinant; GLUL active protein

### PRODUCT SPECIFICATIONS

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                | E Coli                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Purity/Purification | Greater than 90.0% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Form/Format         | Sterile filtered colorless solution.<br>GLUL Human solution containing 20mM Tris-HCl pH-8, 5mM DTT, 0.2M NaCl & 20% glycerol.                                                                                                                                                                                                                                                                                                                                    |
| Sequence            | MGSSHHH HHHSSGLVPR GSHMTT SASSHLNKG I KQVYMSLPQG EKVQAMYIWI DGTGEGLRCK<br>TRTL DSEPKC VEELPEWNFD GSSTLQSEGS NSDMYLPAA MFRDPFRKDP NKLVLCEVFK YNRRPAETNL<br>RHTCKRIMDM VSNQHPWFGM EQEYTLMGTD GHPFGWPSNG FPGPQGPPYC GVGADRAYGR DIVEAHYRAC<br>LYAGVKIAGT NAEVMPAQWE FQIGPCEGIS MGDHLWVARF ILHRVCEDFG VIATFDPKPI PGNWNGAGCH<br>TNFSTKAMRE ENGLKYIEEA IEKLSKRHQY HIRAYDPKGG LDNARRLTGF HETSNINDFS AGVANRSASI<br>RIPRTVGQEK KGYFEDRRPS ANCDPFSVTE ALIRTCLLNE TGDEPFQYKN |
| Sequence Length     | 373                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Biological Activity | Specific activity is > 2, 800 pmol/min/ug, and is defined as the amount of enzyme that convert 1.0 pmole of L-glutamate to L-glutamine per minute at pH 7.5 at 37C in coupled system with PK/LDH.                                                                                                                                                                                                                                                                |

### ADDITIONAL INFORMATION

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|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for GLUL active protein | <p>Description: GLUL Recombinant Human produced in E Coli is a single, non-glycosylated polypeptide chain containing 393 amino acids (1-373 a.a.) and having a molecular mass of 44.2 kDa. The GLUL is fused to a 20 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.</p> <p>Introduction: GLUL catalyzes the synthesis of glutamine from glutamate and ammonia. Glutamine is a major source of energy and that takes part in cell proliferation, inhibition of apoptosis, and cell signaling. GLUL is expressed during early fetal stages, and has a role in maintaining body pH by removing ammonia from circulation. Mutations in GLUL gene are related with congenital glutamine deficiency.</p> |
| Product Categories/Family for GLUL active protein   | <a href="#">Enzymes</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### NCBI AND UNIPROT INFORMATION

|                           |                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                 | <a href="#">74271837</a>                                                                                                   |
| NCBI GeneID               | <a href="#">2752</a>                                                                                                       |
| NCBI Accession #          | <a href="#">NP_001028216.1</a>                                                                                             |
| NCBI GenBank Nucleotide # | <a href="#">NM_001033044.3</a>                                                                                             |
| UniProt Accession #       | <a href="#">P15104</a> ; <a href="#">Q499Y9</a> ; <a href="#">Q5T9Z1</a> ; <a href="#">Q7Z3W4</a> ; <a href="#">Q8IZ17</a> |
| Molecular Weight          | 42,064 Da                                                                                                                  |

|                                  |                          |
|----------------------------------|--------------------------|
| NCBI Official Full Name          | glutamine synthetase     |
| NCBI Official Synonym Full Names | glutamate-ammonia ligase |
| NCBI Official Symbol             | GLUL                     |
| NCBI Official Synonym Symbols    | GS; GLNS; PIG43; PIG59   |
| NCBI Protein Information         | glutamine synthetase     |
| UniProt Protein Name             | Glutamine synthetase     |
| UniProt Gene Name                | <b>GLUL</b>              |
| UniProt Synonym Gene Names       | GLNS; GS                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/glutamine-synthetase/39145>