

## 32-6767: GLUL Human, His Active

**Application :** Functional Assay  
**Alternative Name :** GLNS, EC 6.3.1.2, EC 4.1.1.15, GLUL, Glutamine Synthetase, GS, Glutamate decarboxylase, Glutamate--ammonia ligase, PIG43, PIG59.

### Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

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.

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.

### Product Info

**Amount :** 2 µg / 10 µg  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** GLUL Human solution containing 20mM Tris-HCl pH-8, 5mM DTT, 0.2M NaCl & 20% glycerol.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MTTASSHLN KGIKQVYMSL PQGEKVQAMY IWIDGTGEGE  
RCKTRTL DSE PKCVELPEW 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.

### Application Note

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.