

## 32-6766: GLUL Human, Active

**Application :** Functional Assay

**Alternative Name :** Glutamine synthetase, GLUL Active, GLUL, Glutamine Synthetase, Active, GLNS, GS, PIG43, PIG59, Glutamate decarboxylase (EC:4.1.1.15), Glutamate--ammonia ligase.

### 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 373 amino acids (1-373) and having a molecular mass of 42kDa.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 85.0% as determined by SDS-PAGE.

**Content :** GLUL protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 10% glycerol 1mM DTT and 0.1mM PMSF.

**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 :** MTTSSASSHLN KGIKQVYMSL PQGEKVQAMY IWIDGTGEGE RCKTRTLDSE PKCVEELPEW NFDGSSTLQS  
EGSNSDMYLV PAAMFRDPFR KDPNKLVLCE VFKNRRPAE TNLRHCTCKRI MDMVSNQHPW  
FGMEQEYTLN GTDGHFPGWP SNGFPGPQGP YYCGVGADRA YGRDIVEAHY RACLYAGVKI  
AGTNAEVMPA QWEFQIGPCE GISMGDHLWV ARFILHRVCE DFGVIATFDP KPIPGNWNGA GCHTNFSTKA  
MREENGLKYI EEAIEKLSKR HQYHIRAYDP KGGLDNARRL TGFHETSIN DFSAGVANRS ASIRIPRTVG  
QEKKGYPEDR RPSANCDPFS VTEALIRTCL LNETGDEPFQ YKN.

### Application Note

Specific activity is > 2.000 pmol/min/ug, and is defined as the amount of enzyme that convert L-glutamate to L-glutamine per miunte at pH 7.5 at 37C in coupled system with PK/LDH.