

Product information

GLUL, 1-373aa

Human, Recombinant, *E.coli*

Cat. No. IBATGP3404

Full name: Glutamine synthetase

NCBI Accession No.: NP_001028216

Synonyms: GLNS, GS, PIG43, PIG59

Description: GLUL also known as Glutamine synthetase. It is a trimetallic enzyme containing two divalent cation sites and one monovalent cation site per subunit. GLUL is able to regulate intracellular concentrations of glutamate and catalyzes the synthesis of glutamine from glutamate and ammonia. It is ubiquitously expressed in the human and plays a major role for many metabolic pathways such as cell proliferation, inhibition of apoptosis, and cell signaling. Recombinant Human GLUL was expressed in *E.coli* and purified by using conventional chromatography techniques.

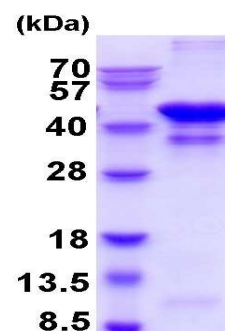
Form: Liquid. In 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol
1mM DTT, 0.1mM PMSF

Molecular Weight: 42kDa (373aa), confirmed by MALDI-TOF

Purity: ≥85% by SDS - PAGE

Concentration: 1mg/ml (determined by Absorbance at 280nm)

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



15% SDS-PAGE (3ug)

Sequences of amino acids:

MTTSASSHLN KGIKQVYMSL PQGEKVQAMY IWIDGTGEGE RCKTRTL DSE PKCVEELPEW NFDGSSTLQS EGSNSDMYLV PAAMFRDPFR
KDPNKLVLCE VFYNNRRPAE TNLRHTCKRI MDMVSNQHPW FGMEQEYTLM GTDGHFPGWP SNGFPGPQGP YYCGVGADRA YGRDIVEAHY
RACL YAGVKI AGTNAEVMPA QWEFQIGPCE GISMGDHLWV ARFILHRVCE DFGVIATFDP KPIPGNWNWA GCHTNFSTKA MREENGLKYI
EEAIEKLSKR HQYHIRAYDP KGGLDNARRL TGFHETSNIN DFSAGVANRS ASIRIPRTVG QEKKGYFEDR RPSANCDPFS VTEALIRTCL
LNETGDEPFQ YKN

General references:

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

Vermeulen T., *et al.* (2008) *Arch Biochem Biophys.* 478(1): 96-102.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.
Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.