

GLUL, 1-373aa, Human, His-tag, E.coli (Bioactivity Validated)

Cat.NO.: TP02266

3th Edition

Synonyms:Glutamine synthetase, GS, GLNS.

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

Form:Liquid. In 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 5mM DTT, 200mM NaCl

Molecular Weight:44.2kDa (393aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHHSSGLVPRGSHMTTSASSHLNKGIKQVYMSLPQGEKVQAMYIWIDGTGEGLRCKTRTLDSEPKCV
EELPEWNFDGSSTLQSEGSNSDMYLVPAAMFRDPFRKDPNKLVLCEVFKYNRRPAETNLRHTCKRIMDMVSNQH
PWFGMEQEYTLMGTDGHPFGWPSNGFPGPQGPYYCGVGADRAYGRDIVEAHYRACLYAGVKIAGTNAEVMPAQ
WEFQIGPCEGISMGDHLWVARFILHRVCEDFGVIATFDPKPIPGNWNGAGCHTNFSTKAMREENGLKYIEEAIEKLS
KRHQYHIRAYDPKGGLDNARRLTGFHETSNINDFSAGVANRSASIRIPRTVGQEKKGYFEDRRPSANCDPFSVTEA
LIRTCLLNETGDEPFQYKN

Purity:> 95% by HPLC

Concentration:1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.