
Product Data Sheet

Product Name: GLUL Human, His Active
 Cat. No.: GP21695
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	GLNS; EC 6.3.1.2; EC 4.1.1.15; GLUL; Glutamine Synthetase; GS; Glutamate decarboxylase; Glutamate--ammonia ligase; PIG43; PIG59.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MTTSSASHLN KGIKQVYMSL PQGEKVQAMY IWIDGTGEGE RCKTRTLDSE PKCVEELPEW 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.		
Formulation	GLUL Human solution containing 20mM Tris-HCl pH-8, 5mM DTT, 0.2M NaCl & 20% glycerol.		

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.

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.

Stability

Caution: Product has not been fully validated for medical applications. For research use only.

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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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.

Background

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.

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