Active Recombinant Human GLS Protein, His-tagged

Cat. No. GLS-08H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human Glutaminase protein (Ser17-Leu669) with N-terminal Met and 6-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	17-669 a.a.
Description	This gene encodes the K-type mitochondrial glutaminase. The encoded protein is an phosphate-activated amidohydrolase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. This protein is primarily expressed in the brain and kidney plays an essential role in generating energy for metabolism, synthesizing the brain neurotransmitter glutamate and maintaining acid-base balance in the kidney. Alternate splicing results in multiple transcript variants.
Bio-activity	Measured by its ability to hydrolyze glutamine to glutamate. The specific activity is >12000 pmol/min/μg, as measured under the described conditions.
Molecular Mass	73 kDa
AA Sequence	MAGHLASDFAFSPPPGGGGDGPGGPEPGWVDPRTWLSFQGPPGGPGIGPGVGP GSEVWGIPPCPPPYEFCGGMAYCGPQVGVGLVPQGGLETSQPEGEAGVGVESNS DGASPEPCTVTPGAVKLEKEKLEQNPEESQDIKALQKELEQFAKLLKQKRITLGYTQ ADVGLTLGVLFGKVFSQTTICRFEALQLSFKNMCKLRPLLQKWVEEADNNENLQEIC

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	KAETLVQARKRKRTSIENRVRGNLENLFLQCPKPTLQQISHIAQQLGLEKDVVRVWF CNRRQKGKRSSSDYAQREDFEAAGSPFSGGPVSFPLAPGPHFGTPGYGSPHFTAL YSSVPFPEGEAFPPVSVTTLGSPMHSNESGGGGSPGRRRRRRRRRRR
N-terminal Sequence Analysis	Met
Purity	> 80%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Enzyme Activity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -70 centigrade as supplied. 3 months, -70 centigrade under sterile conditions after opening.
Storage Buffer	Supplied as a 0.2 µm filtered solution in Tris, NaCl, TCEP, Glycerol and CHAPS.
Shipping	The product is shipped with polar packs.

GENE INFORMATION

Gene Name	GLS glutaminase [Homo sapiens (human)]
Official Symbol	GLS
Synonyms	GLS; glutaminase; GAC; GAM; KGA; GLS1; AAD20; DEE71; GDPAG; CASGID; EIEE71; glutaminase kidney isoform, mitochondrial; K-glutaminase; L-glutamine amidohydrolase; glutaminase C; glutaminase, phosphate-activated; EC 3.5.1.2
Gene ID	2744

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_014905
Protein Refseq	NP_055720
MIM	138280
UniProt ID	O94925
Enzyme Activity	Recombinant Human Glutaminase His-tag is measured by its ability to hydrolyze glutamine to glutamate. The activity (orange) is higher than the competitor's Glutaminase (green).
Recombinant Human Glutaminase His-tag Protein SDS-PAGE	1 μg/lane of Recombinant Human Glutaminase His-tag and 1 μg/lane of competitor Human Glutaminase was resolved with 4-20% SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by silver staining.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA