Recombinant Human Glutamine--tRNA ligase (QARS)

Product Code	CSB-EP019132HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P47897
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	AALDSLSLF TSLGLSEQKA RETLKNSALS AQLREAATQA QQTLGSTIDK ATGILLYGLA SRLRDTRRLS FLVSYIASKK IHTEPQLSAA LEYVRSHPLD PIDTVDFERE CGVGVIVTPE QIEEAVEAAI NRHRPQLLVE RYHFNMGLLM GEARAVLKWA DGKMIKNEVD MQVLHLLGPK LEADLEKKFK VAKARLEETD RRTAKDVVEN GETADQTLSL MEQLRGEALK FHKPGENYKT PGYVVTPHTM NLLKQHLEIT GGQVRTRFPP EPNGILHIGH AKAINFNFGY AKANNGICFL RFDDTNPEKE EAKFFTAICD MVAWLGYTPY KVTYASDYFD QLYAWAVELI RRGLAYVCHQ RGEELKGHNT LPSPWRDRPM EESLLLFEAM RKGKFSEGEA TLRMKLVMED GKMDPVAYRV KYTPHHRTGD KWCIYPTYDY THCLCDSIEH ITHSLCTKEF QARRSSYFWL CNALDVYCPV QWEYGRLNLH YAVVSKRKIL QLVATGAVRD WDDPRLFTLT ALRRRGFPPE AINNFCARVG VTVAQTTMEP HLLEACVRDV LNDTAPRAMA VLESLRVIIT NFPAAKSLDI QVPNFPADET KGFHQVPFAP IVFIERTDFK EEPEPGFKRL AWGQPVGLRH TGYVIELQHV VKGPSGCVES LEVTCRRADA GEKPKAFIHW VSQPLMCEVR LYERLFQHKN PEDPTEVPGG FLSDLNLASL HVVDAALVDC SVALAKPFDK FQFERLGYFS VDPDSHQGKL VFNRTVTLKE DPGKV
Source	E.coli
Target Names	QARS
Protein Names	Recommended name: Glutamine--tRNA ligase EC= 6.1.1.18 Alternative name(s): Glutaminyl-tRNA synthetase Short name= GlnRS
Expression Region	2-775
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. In metazoans, 9 aminoacyl-tRNA synthetases specific for glutamine (gln), glutamic acid (glu), and 7 other amino acids are associated within a multienzyme complex. Although present in eukaryotes, glutaminyl-tRNA synthetase (QARS) is absent from many

	prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by transamidation of the misacylated Glu-tRNA(Gln). Glutaminyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.