

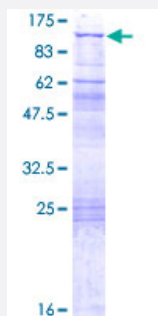
Full-Length

QARS (Human) Recombinant Protein (P01)

Catalog # H00005859-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human QARS full-length ORF (NP_005042.1, 1 a.a. - 775 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAALDSLSLFTSLGLSEQKARETLKNSALSAQLREAATQAQQLGSTIDKATGILLYGLASRLRDTR
RLSFLVSYASKKIHTPEQLSAALEYVRSHPLDPIDTVDFERECGVGVITPEQIEEAVEAAINRHRP
QLLVERYHFNMGLLMGEARAVLKWADGKMIKNEVDMQVLHLLGPKLEADLEKKFKVAKARLEET
DRRTAKDVVENGETADQTLSLMEQLRGEALKFHKPGENYKTPGYVTPHTMNLKQHLEITGGQV
RTRFPPEPNGILHIGHAKAINFNFGYAKANNGICFLRFDDTNPEKEEAKFFTAICDMVAWLGYTPYK
VTYASDYFDQLYAWAVELIRRLAYVCHQRGEELKGHNTLPSPWRDRPMEESLLLFEAMRKGGKF
SEGEATLRMKLVMEDGKMDDPVAYRVKYTPHHRTGDKWCYPTYDYTHCLCDSIEHITHSLCTKEFQ
ARRSSYFWLCNALDVYCPVQWEYGRNLNHYAVVSKRKILQLVATGAVRDWDDPRLFTLTALRRR
GFPPEAINNFCARVGVTVAQTTMEPHLLEACVRDVLNDTAPRAMAVLESLRVIITNFPAAKSLDIQ
VPNFPADETKGFHQVPFAPIVFIERTDFKEEPEPGFKRLAWGQPVGLRHTGYVIELQHVVKGPSG
CVESLEVTCRRADAGEKPKAFIHWVSQPLMCEVRLYERLFQHKNPEDPTEVPGGFLSDNLNLSL
HVVDAALVDCSVALAKPFDKFQFERLGYSVDPDSSHQGLVFNRVTTLKEDPGKV

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

114.2

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — QARS

Entrez GeneID	5859
GeneBank Accession#	NM_005051.1
Protein Accession#	NP_005042.1
Gene Name	QARS
Gene Alias	GLNRS, PRO2195
Gene Description	glutamyl-tRNA synthetase
Omim ID	603727
Gene Ontology	Hyperlink

Gene Summary	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, glutamyl-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). Glutamyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family. [provided by RefSeq]
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Other Designations

glutamine tRNA ligase|glutamine-tRNA synthetase

Pathway

- [Aminoacyl-tRNA biosynthesis](#)
- [Metabolic pathways](#)