

# **Product datasheet for PH301784**

# OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### QARS1 (NM\_005051) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** QARS MS Standard C13 and N15-labeled recombinant protein (NP\_005042)

Species: Human
Expression Host: HEK293

Expression cDNA Clone

RC201784

or AA Sequence: Predicted MW:

87.8 kDa

Protein Sequence: >RC201784 protein sequence

Red=Cloning site Green=Tags(s)

MAALDSLSLFTSLGLSEQKARETLKNSALSAQLREAATQAQQTLGSTIDKATGILLYGLASRLRDTRRLS FLVSYIASKKIHTEPQLSAALEYVRSHPLDPIDTVDFERECGVGVIVTPEQIEEAVEAAINRHRPQLLVE RYHFNMGLLMGEARAVLKWADGKMIKNEVDMQVLHLLGPKLEADLEKKFKVAKARLEETDRRTAKDVVEN GETADQTLSLMEQLRGEALKFHKPGENYKTPGYVVTPHTMNLLKQHLEITGGQVRTRFPPEPNGILHIGH AKAINFNFGYAKANNGICFLRFDDTNPEKEEAKFFTAICDMVAWLGYTPYKVTYASDYFDQLYAWAVELI RRGLAYVCHQRGEELKGHNTLPSPWRDRPMEESLLLFEAMRKGKFSEGEATLRMKLVMEDGKMDPVAYRV KYTPHHRTGDKWCIYPTYDYTHCLCDSIEHITHSLCTKEFQARRSSYFWLCNALDVYCPVQWEYGRLNLH YAVVSKRKILQLVATGAVRDWDDPRLFTLTALRRRGFPPEAINNFCARVGVTVAQTTMEPHLLEACVRDV LNDTAPRAMAVLESLRVIITNFPAAKSLDIQVPNFPADETKGFHQVPFAPIVFIERTDFKEEPEPGFKRL AWGQPVGLRHTGYVIELQHVVKGPSGCVESLEVTCRRADAGEKPKAFIHWVSQPLMCEVRLYERLFQHKN PEDPTEVPGGFLSDLNLASLHVVDAALVDCSVALAKPFDKFQFERLGYFSVDPDSHQGKLVFNRTVTLKE

DPGKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

**Stability:** Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 005042



#### QARS1 (NM\_005051) Human Mass Spec Standard - PH301784

RefSeq Size: 2843

RefSeq ORF: 2325

Synonyms: GLNRS; MSCCA; PRO2195; QARS

**Locus ID:** 5859

UniProt ID: <u>P47897</u>, <u>B7Z840</u>

Cytogenetics: 3p21.31

**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 the latest action of the synthetases are triplets and table to be among the first proteins (also be appeared to be

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

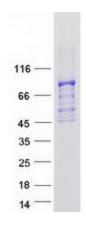
transamidation of the misacylated Glu-tRNA(Gln). Glutaminyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family. Alternative splicing results in multiple transcript

variants. [provided by RefSeq, Jan 2013]

**Protein Families:** Druggable Genome

**Protein Pathways:** Aminoacyl-tRNA biosynthesis, Metabolic pathways

# **Product images:**



Coomassie blue staining of purified QARS protein (Cat# [TP301784]). The protein was produced from HEK293T cells transfected with QARS cDNA clone (Cat# [RC201784]) using MegaTran 2.0 (Cat# [TT210002]).