Recombinant Human GARS, His-tagged

Cat. No. GARS-263H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	GARS, 43-289aa, Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	43-289aa
Description	GARS, also known as glycyl-tRNA synthetase, is one of the aminoacyl-tRNA synthetases that charge tRNAs with their cognate amino acids. This enzyme is an (alpha)2 dimer which belongs to the class II family of tRNA synthetases. It has been shown to be a target of autoantibodies in the human autoimmune diseases, polymyositis or dermatomyositis. Recombinant human GARS protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT
Molecular Mass	30.0 kDa (270aa), confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSPISLPAA ASRSSMDGAG AEEVLAPLRL AVRQQGDLVR KLKEDKAPQV DVDKAVAELK ARKRVLEAKE LALQPKDDIV DRAKMEDTLK RRFFYDQAFA IYGGVSGLYD FGPVGCALKN NIIQTWRQHF IQEEQILEID CTMLTPEPVL KTSGHVDKFA DFMVKDVKNG ECFRADHLLK

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

	AHLQKLMSDK KCSVEKKSEM ESVLAQLDNY GQQELADLFV NYNVKSPITG NDLSPPVSFN LMFKTFIGPG
Purity	>85% by SDS - PAGE
Storage	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.
Concentration	0.5 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name	GARS glycyl-tRNA synthetase [Homo sapiens]
Official Symbol	GARS
Synonyms	GARS; glycyl-tRNA synthetase; Charcot Marie Tooth neuropathy 2D , CMT2D; glycine--tRNA ligase; DSMAV; glycine tRNA ligase; GlyRS; SMAD1; AP-4-A synthetase; Charcot-Marie-Tooth neuropathy 2D; diadenosine tetraphosphate synthetase; Charcot-Marie-Tooth neuropathy, neuronal type, D; HMN5; CMT2D;
Gene ID	2617
mRNA Refseq	NM_002047
Protein Refseq	NP_002038
MIM	600287
UniProt ID	P41250

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

Chromosome Location	7p15
Pathway	Aminoacyl-tRNA biosynthesis, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, conserved biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, conserved biosystem; Cytosolic tRNA aminoacylation, organism-specific biosystem; Gene Expression, organism-specific biosystem; Mitochondrial tRNA aminoacylation, organism-specific biosystem;
Function	ATP binding; glycine-tRNA ligase activity; glycine-tRNA ligase activity; ligase activity; nucleotide binding; protein dimerization activity;

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