## 32-2337: GARS Recombinant Protein

Alternative Name Glycine--tRNA ligase,Diadenosine tetraphosphate synthetase,AP-4-A synthetase,Glycyl-tRNA : synthetase,GlyRS,GARS,CMT2D,DSMAV,HMN5,SMAD1.

## Description

Source : Escherichia Coli. GARS Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 270 amino acids (43-289 a.a) and having a molecular mass of 30kDa.GARS is fused to a 23 amino acid His-tag at N-terminus \& purified by proprietary chromatographic techniques. GARS is an (alpha) 2 dimer which is a member of the class II family of tRNA synthetases. GARS is a glycyl-tRNA synthetase, one of the aminoacyl-tRNA synthetases which charge tRNAs with their cognate amino acids. GARS catalyzes the attachment of glycine to tRNA(Gly). In addition, GARS is able to produce diadenosine tetraphosphate (Ap4A), which is a universal pleiotropic signaling molecule required for cell regulation pathways, by direct condensation of two ATPs. GARS has been demonstrated to be a target of autoantibodies in the human autoimmune diseases, polymyositis or dermatomyositis.

## Product Info

| Amount : | $10 \mu \mathrm{~g}$ |
| :---: | :---: |
| Purification : | Greater than 85.0\% as determined by SDS-PAGE. |
| Content : | GARS protein solution ( $0.5 \mathrm{mg} / \mathrm{ml}$ ) containing 20 mM Tris-HCl buffer ( pH 8.0 ), $0.15 \mathrm{M} \mathrm{NaCl}, 10 \%$ glycerol and 1mM DTT. |
| Storage condition : | Store at $4^{\circ} \mathrm{C}$ if entire vial will be used within 2-4 weeks. Store, frozen at $-20^{\circ} \mathrm{C}$ for longer periods of time. For long term storage it is recommended to add a carrier protein ( $0.1 \%$ HSA or BSA).Avoid multiple freeze-thaw cycles. |
| Amino Acid : | MGSSHHHHHH SSGLVPRGSH MGSPISLPAA ASRSSMDGAG AEEVLAPLRL AVRQQGDLVR |
|  | KLKEDKAPQV DVDKAVAELK ARKRVLEAKE LALQPKDDIV DRAKMEDTLK RRFFYDQAFA IYGGVSGLYD |
|  | FGPVGCALKN NIIQTWRQHF IQEEQILEID CTMLTPEPVL KTSGHVDKFA DFMVKDVKNG ECFRADHLLK |
|  | AHLQKLMSDK KCSVEKKSEM ESVLAQLDNY GQQELADLFV NYNVKSPITG NDLSPPVSFN LMFKTFIGPG. |



