

## 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

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 10 µg   |
| <b>Purification :</b>      | Greater than 85.0% as determined by SDS-PAGE.   |
| <b>Content :</b>           | GARS protein solution (0. 5mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 10% glycerol and 1mM DTT.   |
| <b>Storage condition :</b> | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°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.   |
| <b>Amino Acid :</b>        | MGSSHHHHHH SSGLVPRGSH MGSPISLPAA ASRSSMDGAG AEEVLAPLRL AVRQQGDLVR<br>KLKEDKAPQV DVDKAVAEK ARKRVLEAKE LALQPKDDIV DRKMEDTLK RRFYDQAF A IYGGVSGLYD<br>FGPVGCAKN NIIQTWRQHF IQEEQILEID CTMLTPEPVL KTS GHVDKFA DFMVKDVKNG ECFRADHLLK<br>AHLQKLMSDK KCSVEKKSEM ESVLAQLDNY GQELADLFV NYNVKSPITG NDLSPPVSFN LMFKTFIGPG. |

