

## 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 µg  
**Purification :** Greater than 85.0% as determined by SDS-PAGE.  
**Content :** GARS protein solution (0.5 mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 10% glycerol and 1mM DTT.  
**Storage condition :** 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.  
**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSPISLPAA ASRSSMDGAG AEEVLAPLRL AVRQQGDLVR KLKEDKAPQV DVDKAVAELEK ARKRVLEAKE LALQPKDDIV DRAKMEDTLK RRFYDQAFI IYGGVSGLYD FGPVGCALKN NIIQWVRQHF IQEEQILEID CTMLTPEPVL KTSQGHVDKFA DFMVKDVKNG ECFRADHLLK AHLQKLMSDK KCSVEKKSEM ESVAQLDNY GQQLADLFV NYNVKSPITG NDLSPPVSFN LMFKTFIGPG.

