

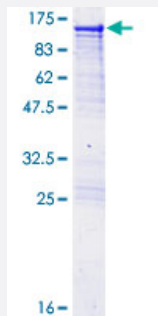
## Full-Length

# AARS (Human) Recombinant Protein (P01)

Catalog # H00000016-P01

Size 10 ug, 25 ug

## Applications



## Specification

### Product Description

Human AARS full-length ORF ( NP\_001596.2, 1 a.a. - 968 a.a.) recombinant protein with GST-tag at N-terminal.

### Sequence

MDSTLTASEIRQRFIDFFKRNEHTYVHSSATIPDDPTLLFANAGMNQFKPIFLNTIDPSHPMAKLSR  
AANTQKCIRAGGKHNDLDDVGKDVYHHTFFEMLGSWSGDYFKELACKMALELLTQEFGIPIERL  
YVTYFGGDEAAGLEADLECKQIWQNLGLDDTKILPGNMKDNFWEMGDTGPCGPCSEIHYDRIGG  
RDA AHLVNQDDPNVLEIWNLVFIQYNREADGILKPLPKKSIDTGMGLERLVSVLQNKMSNYDTDLF  
VPYFEAIQKGTGARPYTGKVGAEADADGIDMAYRVLADHARTITVALADGGRPDNTGRGYLRRILR  
RAVRYAHEKLNASRGFFATLVDVVVQSLGDAFPELKKDPDMVKDIINEEEVQFLKTLRGRRILDR  
KIQSLGDSKTIPGDTAWLLYDTYGFPVDLTGLIAEEKGLVDMGDFEEERKLAQLKSQKGAGGE  
DLIMLDIYAEELRARGLEVTDSPKYNHLDSSGSYVFENTVATVMALRREKMFVEEVSTGQECG  
VVLDKTCFYAEQGGQIYDEGYLVKVDSSSEDKTEFTVKNAQVRGGYVLHIGTIYGLKVGQVWL  
FIDEPRRRPIMSNHTATHILNFALRSVLGEADQKGSVLAPDRLRFDTAKGAMSTQQIKKAEIANE  
MIEAAKAVYTQDCPLAAAKAIQGLRAVFDETPDPVRVVSIGVPVSELLDDPSGPAGSLTSVEFC  
GGTHLRNSSHAGAFVIVTEEAIKGIIRMAVTGAEAQKALRKAESLKKCLSVMEAKVKAQTAPNK  
DVQREIADLGEALATAVIPQWQKDELRETLKSLKKVMDDLDRAKADVQKRVLEKTKQFIDSNPN  
QPLVILEMESGASAKALNEALKLFKMHPQTSAMLFVTDNEAGKITCLCQVPQNAANRGLKASE  
WVQQVSGLMDGKGGGKDVSAQATGKNVGCLQEALQLATSFAQLRLGDVKN

### Host

Wheat Germ (in vitro)

### Theoretical MW (kDa)

133.2

**Interspecies Antigen Sequence**

Mouse (96); Rat (95)

**Preparation Method**[in vitro wheat germ expression system](#)**Purification**

Glutathione Sepharose 4 Fast Flow

**Quality Control Testing**

12.5% SDS-PAGE Stained with Coomassie Blue.

**Storage Buffer**

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

**Storage Instruction**

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

**Note**

Best use within three months from the date of receipt of this protein.

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — AARS

**Entrez GeneID**[16](#)**GeneBank Accession#**[NM\\_001605.2](#)**Protein Accession#**[NP\\_001596.2](#)**Gene Name**

AARS

**Gene Alias**

-

**Gene Description**

alanyl-tRNA synthetase

**Omim ID**[601065](#)**Gene Ontology**[Hyperlink](#)

**Gene Summary**

The human alanyl-tRNA synthetase (AARS) belongs to a family of tRNA synthases, of the class II enzymes. Class II tRNA synthases evolved early in evolution and are highly conserved. This is reflected by the fact that 498 of the 968-residue polypeptide human AARS shares 41% identity with the E.coli protein. tRNA synthases are the enzymes that interpret the RNA code and attach specific amino acids to the tRNAs that contain the cognate trinucleotide anticodons. They consist of a catalytic domain which interacts with the amino acid acceptor-T psi C helix of the tRNA, and a second domain which interacts with the rest of the tRNA structure. [provided by RefSeq]

**Other Designations**

alanine tRNA ligase 1, cytoplasmic

**Pathway**

- [Aminoacyl-tRNA biosynthesis](#)