

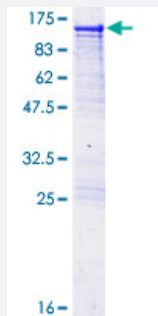
Full-Length

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
VVLDKTCFYAEQGGQIYDEGYLVKVDSSSEDKTEFTVKNAQVRGGYVLHIGTIYGLKVG DQVWL
FIDEPRRRPIMSNHTATHILNFALRSVLGEADQKGS LVAPDRLRFDFTAKGAMSTQQIKKAE EIANE
MIEAAKAVYTQDCPLAAAKAIQGLRAVFDETYDPVRVVSIGVPVSELLDDPSGPAGSLTSVEFC
GGTHLRNSSHAGAFVIVTEEAIKGI RRVAVTGAE AQKALRKAESLKKCLSVMEAKVKAQTAPNK
DVQREIADLGEALATAVIPQWQKDELRETLKSLKKVMDDLDRAKADVQKRVLEKTKQFIDSNPN
QPLVILEMESGASAKALNEALKLFKMHPQTSAMLF TVDNEAGKITCLCQVPQNAANRGLKASE
WVQQVSG LMDGKGGGKDVSAQATGKNVGCLQEALQLATSFAQLRLGDVKN

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 synthetases, of the class II enzymes. Class II tRNA synthetases 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 synthetases 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](#)