

# Datasheet

## Human AARS Recombinant Protein

**Catalog Number:** BGT-PPT-17075

**Regulation Status:** For research use only (RUO)

**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:**

```
MDSTLTASEIRQRFIDFFKRNEHTYVHSSATIPLDDPTL
LFANAGMNFQFKPIFLNTIDPSHPMAKLSRAANTQKCIR
AGGKHNDLDDVVGKDVYHHTFFEMLGWSVFGDYFKEL
ACKMALELLTQEFGIPIERLYVTFYFGGDEAAGLEADLE
CKQIWQNLGLDDTKILPGNMKDNFWEWMDTGPCGPC
SEIHYDRIGGRDAAHLVNQDDPNVLEIWNLVFIQYNRE
ADGILKPLPKKSIDTGMGLERLVSVLQNKMSNYDSDLF
VPYFEAIQKGTGARPYTGKVGAEADADGIDMAYRVLAD
HARTITVALADGGRPDNTGRGYVLRRLRRAVRYAHE
KLNASRGFFATLVDVVVQSLGDAFPELKKDPDMVKDII
NEEEVQFLKTLRGRRLDRKIQSLGDSKTIPGDTAWL
LYDTYGFPVDTGLIAEEKGLVVDMDGFEEERKLAQLK
SQGKGAGGEDLIMLDIYAIEELRARGLEVTDDSPKYN
HLDSSGSYVFENTVATVMALRREKMFVEEVSTGQEC
GVVLDKTCFYAEQGGQIYDEGYLVKVDSSSEDKTEFT
VKNAQVRGGYVLHIGTIYGD LKVG DQVWLFIDEPRR
PIMSNHTATHILNFALRSVLGEADQKGS L VAPDRLRFD
FTAKGAMSTQQIKKAEIEANEMIEAAKAVYTQDCPLAA
AKAIQGLRAVDFEYDPVVRVVSIGVPSSELLDDPSGP
AGSLTSVEFCGGTHLRNSSHAGAFVIVTEEAIKIRRI
VAVTGAEAQKALRKAESLKKLSVMEAKVKAQTAPNK
DVQREIADLGEALATAVIPQWQKDELRETLKSLKKVMD
DLDRASKADVQKRVLEKTKQFIDSNPNQPLVILEMESG
ASAKALNEALKLFKMHSPTSAMLFTVDNEAGKITCLC
QVPQNAANRGLKASEWVQVSG LMDGKGGGKDVSA
QATGKNVGC LQEALQLATSFAQLRLGDVKN
```

**Host:** Wheat Germ (in vitro)

**Theoretical MW (kDa):** 133.2



**Interspecies Antigen Sequence:** Mouse (96); Rat (95)

**Applications:** AP, Array, ELISA, WB-Re

**Preparation Method:** in vitro wheat germ expression system

**Purification:** Glutathione Sepharose 4 Fast Flow

**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.

**Entrez GeneID:** 16

**Gene Symbol:** AARS

**Gene Alias:** -

**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]