# Recombinant Mouse AARS/alanyl-tRNA synthetase Protein (His Tag) 

Note: Centrifuge before opening to ensure complete recovery of vial contents.

## Description

## Synonyms

Species
Expression Host
Sequence
Accession
Calculated Molecular Weight
Observed molecular weight
Tag
Properties
Purity
Endotoxin

Storage

Shipping
Formulation

Reconstitution
Data

AI316495;C76919;sti
Mouse
Baculovirus-Insect Cells
Met 1-Asn 968
Q8BGQ7
108.3 kDa

105 kDa
C-His
$>88 \%$ as determined by reducing SDS-PAGE.
$<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ of the protein as determined by the LAL method.
Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to $-80^{\circ} \mathrm{C}$. Reconstituted protein solution can be stored at $4-8^{\circ} \mathrm{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $<-20^{\circ} \mathrm{C}$ for 3 months.

This product is provided as lyophilized powder which is shipped with ice packs.
Lyophilized from sterile 20 mM Tris, $500 \mathrm{mM} \mathrm{NaCl}, \mathrm{pH} 7.4,10 \%$ glycerol Normally $5 \%-8 \%$ trehalose, mannitol and $0.01 \%$ Tween80 are added as protectants before lyophilization.
Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

$>88 \%$ as determined by reducing SDS-PAGE.

## Background

Alanyl-tRNA synthetase (AARS) belongs to the family of ligases, specifically those forming carbon-oxygen bonds in aminoacyl-tRNA and related compounds. This enzyme participates in alanine and aspartate metabolism and aminoacyltRNA biosynthesis. Alanyl-tRNA synthetase (AlaRS) catalyzes synthesis of Ala-tRNA (Ala) and hydrolysis of misacylated Ser- and Gly-tRNA (Ala) at 2 different catalytic sites. Their role is not confined to catalyze the attachment of amino acids to transfer RNAs and thereby establish the rules of genetic code by virtue of matching the nucleotide triplet of anticodon with cognate amino acid. Under apoptotic conditions in cell culture, the full-length enzyme is secreted, and the two cytokine activities can be generated by leukocyte elastase, an extracellular protease. Secretion of this tRNA synthetase may contribute to apoptosis both by arresting translation and producing needed cytokines. This protein could

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# Recombinant Mouse AARS/alanyl-tRNA synthetase Protein बo (His Tag) <br> by Elabscience <br> Catalog Number:PKSM040710 

be an attractive target of drugs against bacterial, fungal and parasitic infections.

