
Recombinant Mouse AARS / alanyl-tRNA synthetase Protein (His tag)**Cat.NO.: TP06275**

3th Edition

Synonyms:AI316495;C76919;sti

Description: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 aminoacyl-tRNA biosynthesis. Alanyl-tRNA synthetase (AlaRS) catalyzes synthesis of Ala-tRNA (Ala) and hydrolysis of mis-acylated 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 be an attractive target of drugs against bacterial, fungal and parasitic infections.

Form:PBS**Molecular Weight:**108.3 kDa**Sequences:**Met 1-Asn 968**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.