



Recombinant Rat Alanine--tRNA ligase, cytoplasmic (Aars), partial

Product Code	CSB-EP001023RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P50475
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥85% (SDS-PAGE)
Source	E.coli
Target Names	Aars
Protein Names	Recommended name: Alanine--tRNA ligase, cytoplasmic EC= 6.1.1.7 Alternative name(s): Alanyl-tRNA synthetase Short name= AlaRS
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Partial
Target Details	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.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.