



# Recombinant Human Phenylalanine--tRNA ligase, mitochondrial (FARS2)

<b>Product Code</b>	CSB-EP008429HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	O95363
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Source</b>	E.coli
<b>Target Names</b>	FARS2
<b>Protein Names</b>	Recommended name: Phenylalanine--tRNA ligase, mitochondrial EC= 6.1.1.20 Alternative name(s): Phenylalanyl-tRNA synthetase Short name= PheRS
<b>Expression Region</b>	-
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. This gene encodes a phenylalanine-tRNA synthetase (PheRS) localized to the mitochondrion which consists of a single polypeptide chain, unlike the (alpha-beta) <sub>2</sub> structure of the prokaryotic and eukaryotic cytoplasmic forms of PheRS. Structure analysis and catalytic properties indicate mitochondrial PheRSs may constitute a class of PheRS distinct from the enzymes found in prokaryotes and in the eukaryotic cytoplasm.
<b>Reconstitution</b>	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.
<b>Shelf Life</b>	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.