

**FARS2, 37-451aa, Human, His tag, E.coli**

**Cat.NO.: TP02091**

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3th Edition

**Synonyms:** Phenylalanyl-tRNA synthetase 2, mitochondrial, dJ520B18.2, FARS1, HSPC320, PheRS

**Description:** Phenylalanyl-tRNA synthetase 2, mitochondrial (PheRS), also known as FARS2, belongs to the class II aminoacyl-tRNA synthetase family. FARS2 is a mitochondrial matrix protein. Functioning as a monomer, FARS2 catalyzes the ATP-dependent conversion of L-phenylalanine and tRNA (Phe) to L-phenylalanyl-tRNA (Phe), an event that is crucial for proper translation and protein expression. Recombinant human FARS2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 1mM EDTA, 0.1M NaCl

**Molecular Weight:** 50.6kDa (436aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMPAAECATQRAPGSVVELLGKSYQDDHNSLTRKVLTRVGRNLHNQQHHPLWLI  
KERVKEHFYKQYVGRFGTPLFSVYDNLSPVTTWQNFDSLLIPADHPSRKKGDNYLNRTHMLRAHTSAHQWDL  
HAGLDAFLVVGDVYRRDQIDSQHYPHFHQLAVRLFSKHELFAKIDGESLQLFEQSSRSAHKQETHMEAVKLV  
DLKQTLRLMAHLFGDELEIRWVDCYFPFTHPSFEMEINFHGEWLEVLGCGVMEQQLVNSAGAQRIGWAFGLGL  
ERLAMILYDIPDIRLFWCEDERFLKQFCVSNINQKVKFQPLSKYPAVINDISFWLPSENYAENDFYDLVRTIGGDLVEK  
VDLIDKFVHPKTHKTSYRITYRHMERTLSQREVRHIHQALQEAAVQLLGVGRF

**Purity:** > 95% by HPLC

**Concentration:** 0.5 mg/ml (determined by Bradford assay)

**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.