

Product datasheet for **MR207194**

Fars2 (NM_024274) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fars2 (NM_024274) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fars2
Synonyms:	Fars1; pheRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207194 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTCTGCTTGGCTCTCGTCAGAGCTGCCTATGAGCACATCTACCTGGTGAGGAAGGTCAGTCATGCCT
 GCAGATGCCATCAACATCGGGCTTGGAGCTCAAAGCCAGCTGCATCACAGTCTGCTGTCCAGGGTCTCC
 AGGCAGTGTGCTGGAGATACTTGGTAAATCCTACCCTCAGGATGACCACACTAACCTCACCCAGAAGGTC
 CTTTCAAAGTGGGCAGGAACCTGCACAACCAGAAGTTCCACCCTCTGTGGCTGATTAAGGAGCGGGTGA
 AGGAGCACTTCTACCAGCAGTATATGGTGCATCCAGGACACCTCTATTCTCCGTCTATGACCAGCTTCC
 TCCAGTGGTCACCACCTGGCAGAACTTTGATAGCCTGCTAATCCCAGCTGACCACCCAGCAGGAAAAAG
 GGGGACAATACTTGAATCGGGCACACATGCTGAGAGCACACATCAGCGCATCAGTGGGACTTGC
 TGCATCGGGGACTTAATGCCTTCTTGTGGTAGGTGACGTGTATCGTCGTGACCAGATTGATTGCCAGCA
 CTACCCAGTTTTCCACCAGCTGGAGGGTGTCCGGCTTCTCCAAGCATGAGTTATTTGCTGGCGTAAAG
 GATGGAGAAAGCTTGCAGCTCTTTGAAGAAGGTTCTCGCTCTGCTCATAAGCAGGAGACACACCATGG
 AGGCTGTGAAGCTTGTGGAGTTCGACCTTAAACAAGTACTGACTAGGCTTGTGACACATCTTTTTGGAGA
 TGGGCTGGAGGTTGGTGGGTTGCTACTTCCCCTTACCCACCTTCTTCCGAGATGGAGATCAAC
 TTCCGTGGAGAATGGCTTGAAGTCTTGGCTGCGGTGTGATGGAGCAGCAGCTTGTCAATTCAGCTGGTG
 CTCAGGATCGAATCGGCTGGGCGTTTGGCTGGGATTAGAAAGATTGGCGATGGTCTCTACGACATTCC
 TGACATCCGCCTTTCTGGAGTGAGGATGAGCGCTTCTGAAGCAGTTCCTCCTGTCGGACATCAACCAG
 AGTGTCAAGTTTCAGCCTCTTAGCAAGTACCCCGCGTGTCAATGACATTTCAATCTGGCTGCCCTCTG
 AGAATCACCGGAGAATGATTTCTATGACATCGTCCGAACAGTCGGAGGAGACCTGGTAGAAAAGTTGA
 TCTTATAGACAAGTTTGAACATCCAAGACACACAGGACCAGCCACTGCTACCGCATTACCTACCGCCAC
 ATGGAACGGCACTGTCCAGAGAGAAGTCCGCAATGTCCACCAGGCTGTGCAGGAGGCCCGCTGCAGC
 TGCTGGGTGTGGAGGGCCGTTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207194 protein sequence
 Red=Cloning site Green=Tags(s)

MVCLALVRAAYEHIYLVKRVSHACRCHQHRAWSSKPAASQSAVQGAPGSVLEILGKSYPQDDHTNLTKV
 LSKVGRNLHNQKFHPLWL IKERVKEHFYQQYMVRSRTPLF SVYDQLPPVVTTWQNFDSLIPADHPSRKK
 GDNYLNRHMLRAHTSAHQWDL LHAGLNAFLVGDVYRRDQIDCQHYPVFHQLEGVRLF SKHEL FAGVK
 DGESLQLFEEGSRSAHKQETHTMEAVKL VFDLQVLRVTHLFGDGLVVRVDCYFPFTHPSFEMEIN
 FRGEWLEVLGCGVMEQQLVNSAGAQRIGWAFGLGLERLAMVLYDIPDIRLFWSEDERFLKQFLSDINQ
 SVKFQPLSKYPAVFNDISFWLPSENYTENDFYDIVRTVGGDLVEKVDLIDKFEHPKTHRTSHCYRITYRH
 MERTLSQREVGNVHQAVQEAAVQLLGVEGRF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

ACCN: NM_024274

ORF Size: 1356 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_024274.3](#), [NP_077236.1](#)
RefSeq Size: 1896 bp

RefSeq ORF: 1356 bp

Locus ID: 69955

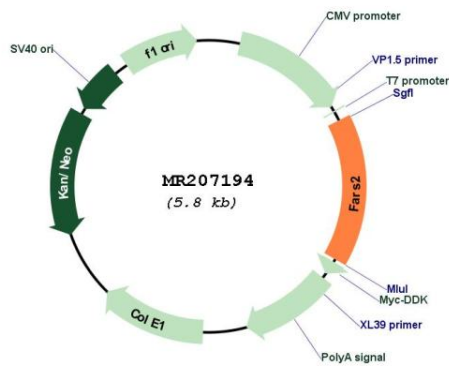
UniProt ID: [Q99M01](#)

Cytogenetics: 13 A3.3

MW: 52.3 kDa

Gene Summary: Is responsible for the charging of tRNA(Phe) with phenylalanine in mitochondrial translation. To a lesser extent, also catalyzes direct attachment of m-Tyr (an oxidized version of Phe) to tRNA(Phe), thereby opening the way for delivery of the misacylated tRNA to the ribosome and incorporation of ROS-damaged amino acid into proteins (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207194