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Product datasheet for RG205843

FARS2 (NM_006567) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FARS2 (NM_006567) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FARS2
Synonyms:	COXPD14; FARS1; HSPC320; mtPheRS; PheRS; SPG77
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG205843 representing NM_006567
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGGCTCAGCTCTCAGGAGAGGTGCCCATGCATATGTCTACCTGGTGAGTAAGGCCAGTCACATCT
CCAGAGGCCATCAGCACCAGGCCTGGGGATCGAGGCCTCCTGCAGCAGAGTGTGCCACCCAAAGAGCTCC
AGGCAGTGTGGTGGAGCTGCTGGGCAAATCCTACCCTCAGGACGACCACAGCAACCTCACCCGGAAGGTC
CTCACCAGAGTTGGCAGGAACCTGCACAACCAGCAGCATCACCCTCTGTGGCTGATCAAGGAGAGGGTGA
AGGAGCACTTCTACAAGCAGTATGTGGGCCGCTTTGGGACCCCGTTGTTCTCGGTCTACGACAACCTTTC
TCCAGTGGTCACGACCTGGCAGAACTTTGACAGCCTGCTCATCCCAGCTGATCACCCCAGCAGGAAGAAG
GGGGACAACTATTACCTGAATCGGACTCACATGCTGAGAGCGCACACGTCTGCACACCAGTGGGACTTGC
TGCACGCGGGACTGGATGCCTTCCTGGTGGTGGGTGATGTCTACAGGCGTGACCAGATCGACTCCCAGCA
CTACCCTATTTTCCACCAGCTGGAGGCCGTGCGGCTCTTCTCCAAACATGAGTTATTTGCTGGTATAAAG
GATGGAGAAAGCCTGCAGCTCTTTGAACAAAGTTCTCGCTCTGCGCATAAACAAGAGACACACACCATGG
AGGCCGTGAAGCTTGTAGAGTTTGATCTTAAGCAAACGCTTACCAGGCTCATGGCACATCTTTTTGGAGA
TGAGCTGGAGATAAGATGGGTAGACTGCTACTTCCCTTTTACACATCCTTCCTTTGAGATGGAGATCAAC
TTTCATGGAGAATGGCTGGAAGTTCTTGGCTGCGGGGTGATGGAACAACAACTGGTCAATTCAGCTGGTG
CTCAAGACCGAATCGGCTGGGCTTTTGGCCTAGGATTAGAAAGGCTAGCCATGATCCTCTACGACATCCC
TGATATCCGTCTCTTCTGGTGTGAGGACGAGCGCTTCCTGAAGCAGTTCTGTGTATCCAACATTAATCAG
AAGGTGAAGTTTCAGCCTCTTAGCAAATATCCGGCTGTGATCAATGATATTTCATTCTGGTTGCCCTCTG
AGAATTACGCAGAAAATGATTTCTATGACTTAGTCCGAACAATTGGAGGAGACCTGGTGGAAAAGGTTGA
TCTCATAGACAAGTTTGTACATCCAAAGACGCACAAGACCAGCCACTGCTACCGCATCACGTACCGCCAC
ATGGAACGGACTCTGTCCCAGAGAGAGGTCAGGCACATCCACCAGGCCTTGCAGGAGGCTGCAGTCCAGC
TGTTGGGTGTGGAGGGCAGGTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

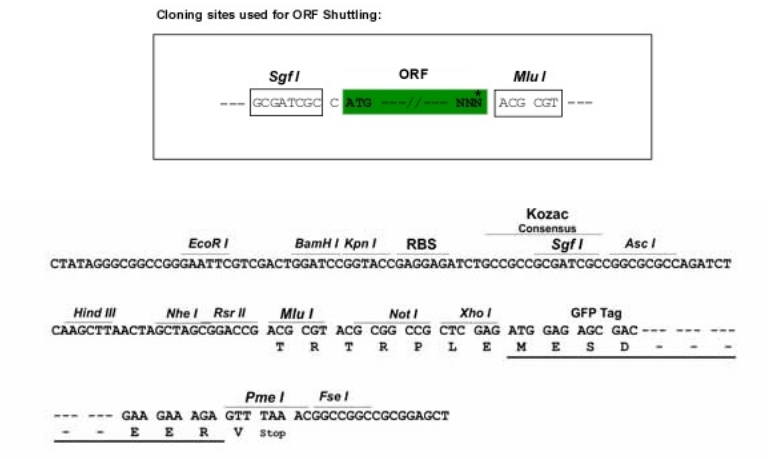
>RG205843 representing NM_006567
Red=Cloning site Green=Tags(s)

MVGSALRRGAHAYVYLVSKASHISRGHQHQAWGSRPPAAECATQRAPGSVVELLGKSYPQDDHSNLTRKV
LTRVGRNLHNQQHHPLWLIKERVKEHFYKQYVGRFGTPLFSVYDNLSPVVTTWQNFDSLLIPADHPSRKK
GDNYYLNRTHMLRAHTSAHQWDLLHAGLDAFLVVGDVYRRDQIDSQHYPIFHQLEAVRLFSKHELFAGIK
DGESLQLFEQSSRSAHKQETHTMEAVKLVEFDLKQTLTRLMAHLFGDELEIRWVDCYFPFTHPSFEMEIN
FHGEWLEVLGCGVMEQQLVNSAGAQDRIGWAFGLGLERLAMILYDIPDIRLFWCEDERFLKQFCVSNINQ
KVKFQPLSKYPAVINDISFWLPSENYAENDFYDLVRTIGGDLVEKVDLIDKFVHPKTHKTSHCYRITYRH
MERTLSQREVRHIHQALQEAAVQLLGVEGRF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



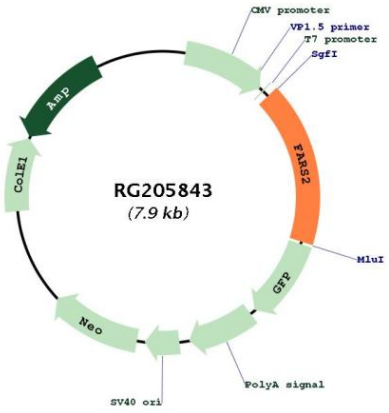
ACCN:	NM_006567
ORF Size:	1353 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_006567.3, NP_006558.1
RefSeq Size:	1841 bp
RefSeq ORF:	1356 bp
Locus ID:	10667
UniProt ID:	O95363
Cytogenetics:	6p25.1

Domains: tRNA-synt_2d, FDX-ACB

Protein Pathways: Aminoacyl-tRNA biosynthesis

Gene Summary: This gene encodes a protein that transfers phenylalanine to its cognate tRNA. This protein localizes to the mitochondrion and plays a role in mitochondrial protein translation. Mutations in this gene can cause combined oxidative phosphorylation deficiency 14 (Alpers encephalopathy). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RG205843