

## Product datasheet for **RC204639**

### **FARSLB (FARSB) (NM\_005687) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FARSLB (FARSB) (NM_005687) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FARSLB
Synonyms:	FARSLB; FRSB; HSPC173; NEDBLLA; PheHB; PheRS; RILDBC; RILDBC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC204639 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCGACTGTCAGCGTGAAGCGTGATCTGCTCTTCCAAGCCCTGGGCCGACCTACACTGACGAAGAAT  
 TTGATGAACTATGTTTTGAATTTGGTCTGGAGCTTGATGAAATTACATCTGAGAAGGAAATAATAAGTAA  
 AGAACAAGGTAATGTAAGGCAGCAGGAGCCTCTGATGTTGTTCTTTACAAAATTGACGTCCTGCCAAT  
 AGATATGATCTCCTGTGTCTGGAAGGATTGGTTCGAGGACTTCAGGTCTTCAAAGAAAGGATAAAGGCTC  
 CAGTGTATAAACGGGTAATGCCTGATGGAAAAATCCAGAAATTGATTATCACAGAAGAGACAGCTAAGAT  
 ACGTCTTTTGGCGTAGCAGCAGTTCTCCGTAATATAAAGTTTACTAAAGATCGATATGACAGCTTCATT  
 GAACCTCAGGAGAAATTACATCAGAATATTTGCAGGAAAAGAGCACTGGTTGCCATTGGTACCCATGATT  
 TGGACACTTTGTCGGGCCATTTACTTAACTGCAAAGCGTCCTTCAGATATCAAATTCAGCCTCTAAA  
 TAAGACCAAGGAGTATACAGCCTGTGAAGTGAACATATACAAGACTGACAATCACCTGAAACATTAT  
 TTACATATCATTGAAAACAAACCCTGTATCCAGTTATCTATGATAGCAATGGTGTGCTCCTTTCAATGC  
 CTCCCATCATCAATGGGGATCATTCCAGAATAACAGTAAATACTAGAAATATTTTTATTGAATGCACGGG  
 AACTGACTTTACTAAGGCAAAAATAGTTCTTGATATTATTGTCACCATGTTCAAGTGAATATTGTGAGAAT  
 CAATTTACGGTCGAAGCTGCTGAAGTGGTTTTTCTTAATGGAAAAACACATACCTTTCCAGAATTAGCTT  
 ACCGAAAGGAGATGGTGAGAGCTGACCTAATAACAAAAAGTTGGAATCAGAGAACTCCAGAAAATCT  
 TGCCAACTTCTGACCAGGATGTATTTAAAATCAGAAGTCATAGGTGATGGGAATCAGATTGAGATTGAA  
 ATCCCTCAACAGAGCTGACATTATCCATGCATGTGATATTGTAGAAGATGCAGCTATTGCTTATGGAT  
 ATAACAACATTCAGATGACTCTCCGAAAACCTACACCATAGCTAATCAATTTCCCTCTTAAATAGCTCAC  
 TGAACCTTCTCCGACATGACATGGCAGCCGCTGGCTTCACTGAAGCACTTACCTTTGCCCTGTGCTCCCAA  
 GAAGATATTGCTGATAAACTAGGTGTGGATATCTCTGCAACAAAGGCAGTCCACATAAGTAAATCCTAAAA  
 CAGCTGAATTTCAAGTGGCAGCAGTACCTTCTTCTGGCCTCTGAAGACCATAGCAGCAAATCGTAA  
 GATGCCCTTCCACTGAAACTGTTTGAATCTCTGACATTGTAATAAAGATTCTAATACAGATGTAGGT  
 GCAAAAAACTACAGACATCTCTGTGCTGTTTATTACAACAAGAATCCTGGGTTTGAGATCATTATGGGC  
 TGCTGGACAGAATTATGCAGTTGCTCGATGTGCCTCCTGGTGAAGACAAGGGGGATATGTATCAAAGC  
 ATCAGAAGGGCTGCTTTCTCCCGGGCGATGTGCAGAGATTTTCCAGGGGTCAAAGCGTCGGGAAG  
 CTTGGGGTCTTCATCCTGACGTTATCACCAAATTTGAGCTGACCATGCCCTGCTCCTCCTAGAAATCA  
 ATATTGGACCCTTTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204639 protein sequence  
 Red=Cloning site Green=Tags(s)

MPTVSVKRDLLFQALGRITYDDEFDELCEFEGLLEDEITSEKEIISKEQGNVKAAGASDVVLYKIDVPAN  
 RYDLLCLEGLVRGLQVFKERIKAPVYKRVMPDGKIQKLIITEETAKIRPFAVAVALRNKIFTKDRYDSFI  
 ELQEKLHQNICRKRALVAIGTHDLDTLSPFTYAKRPSDIKFKPLNKKEYTACELMNIYKTDNHLKHY  
 LHIENKPLYPVIYDSNGVVLSPPIINGDHSRITVNRNIFIECTGDFTKAKIVLDIIVTMFSEYCN  
 QFTVEAAEVVFPNGKSHTFPELAYRKEMVRADL INKKVGIRETPENLAKLLTRMYLKSEVIGDGNQIEIE  
 IPPTRADIIHACDIVEDAAIAYGYNNIQMTLPKTYTIANQFPLNKLTELLRHDMAAGFTEALTFALCSQ  
 EDIADKLGVDISATKAVHISNPKTAEFQVARTLLPGLLKTIAANRKMPLPLKLFESDIVIKDSNTDVG  
 AKNYRHLCAVYVYKNGPFEIIHGLLDRIIMQLLDVPPGEDKGGYVIKASEGPAFFPGRCAEIFARGQSVGK  
 LGVLHPDVITKFELTMPSSLEINIGPFL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6177\\_h10.zip](https://cdn.origene.com/chromatograms/mk6177_h10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_005687

ORF Size: 1767 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_005687.5](#)

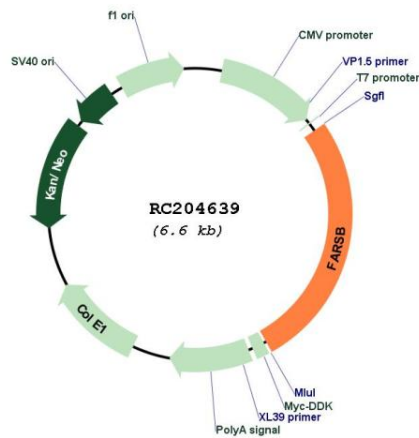
RefSeq Size: 2233 bp

RefSeq ORF: 1770 bp

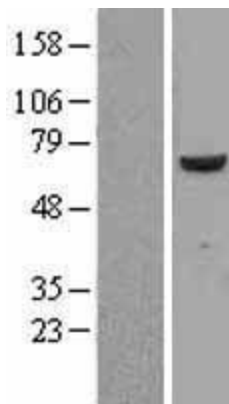
**Locus ID:** 10056  
**UniProt ID:** [Q9NSD9](#)  
**Cytogenetics:** 2q36.1  
**Domains:** B3\_4, B5  
**Protein Pathways:** Aminoacyl-tRNA biosynthesis  
**MW:** 66.1 kDa

**Gene Summary:** This gene encodes a highly conserved enzyme that belongs to the aminoacyl-tRNA synthetase class IIc subfamily. This enzyme comprises the regulatory beta subunits that form a tetramer with two catalytic alpha subunits. In the presence of ATP, this tetramer is responsible for attaching L-phenylalanine to the terminal adenosine of the appropriate tRNA. A pseudogene located on chromosome 10 has been identified. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2015]

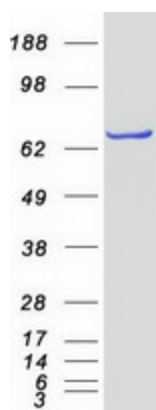
### Product images:



Circular map for RC204639



Western blot validation of overexpression lysate (Cat# [LY401736]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204639 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FARSB protein (Cat# [TP304639]). The protein was produced from HEK293T cells transfected with FARSB cDNA clone (Cat# RC204639) using MegaTran 2.0 (Cat# [TT210002]).