

Product datasheet for **RC205207**

LARS2 (NM_015340) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARS2 (NM_015340) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LARS2
Synonyms:	HLASA; LEURS; mtLeuRS; PRLTS4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205207 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTCTGTTTGGCAGAGATTGGGTTTTATGCCTCTCTTCTGAAAAGACAGCTAAATGGTGGGCCAG
 ATGTCATCAAGTGGGAAAGGAGAGTAATCCCGGATGTACCAGAAGCATCTACAGTGCCACGGGAAAGTG
 GACAAAAGAGTATACATTGCAGACAAGAAAGGATGTTGAGAAATGGTGGCATCAACGAATAAAAGAACAG
 GCCTCCAAAATTTGAGAAGCTGATAAATCGAAGCCAAAATTTTACGTGCTTCCATGTTCCCTTATCCTT
 CTGGTAAGCTGCACATGGGCCATGTGCGTGTCTACACCATCAGCGACACCATAGCACGGTTCAGAAAGAT
 GAGAGGGATGCAGGTCATCAACCCATGGGATGGGATGCTTTGGATTGCCTGCTGAAAATGCCGCAGTC
 GAGAGGAATCTACATCCACAAGTTGGACACAAGTAATATTAACACATGAGGAAACAGCTTGATCGTC
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 TCTCTTTATTAAGTGTATGAGGCTGGGCTGGCCTATCAAAGGAGGCCCTGGTTAACTGGGACCCAGTG
 GATCAAACAGTGTCTGGCAATGAGCAGGTGGATGAACATGGCTGTTTCATGGCGTTCTGGAGCAAAGTGG
 AACAGAAGTACCTCAGACAATGGTTTATTAAGACAACCGCTTATGCAAAGGCCATGCAGGACCGCTTGGC
 AGACCTTCCAGAATGGTATGGAATAAAAGGCATGCAAGCCCACTGGATTGGGGACTGTGTGGGCTGCCAC
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 TAGGAATCCCAGTACTAGCTCAGAGGACACCATCTTAGCCCAAACCCCTGGGCTGGCCTACTCTGAGT
 CATTGAAAATTTGCCAGATGGCACAGAGAGACTGAGCAGCTCTGCTGAGTTCACAGGTATGACCCGGCAG
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 GTCCTTCTTTCCCGAGAAGTGCCTCATCAACTTCTGGTGAAGAT

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205207 protein sequence
 Red=Cloning site Green=Tags(s)

MASVWQRLGFYASLLKRQLNGGPDVIKERRVIPGCTRSIYSATGKWTKEYTLQTRKDVEKWWHQRIKEQ
 ASKISEADKSKPKFYVLSMFYPSPGKLHMGHVRVYTIISDTIARFQKMRGMQVINPMGWDAFGLPAENAAV
 ERNLHPQSWTQSNIKHMRKQLDRLGLCFSDWREITTCCLPDYYKWTQYLFIKLYEAGLAYQKEALVNWDPV
 DQTVLANEQVDEHGCSWRSGAKVEQKYLQWFIKTTAYAKAMDALADLPEWYGIKGMQAHWIGDCVGH
 LDFTLKVHGQATGEKLTAYTATPEAIYGTSHVAISPSHRLHLHGSSLKEALRMALVPGKDCLTPVMAVNM
 LTQQEVPVVILAKADLEGLSLDSKIGIPSTSSDITLAQTLGLAYSEVIETLPDGTERLSSSAEFTGMTRQ
 DAFALALTQKARGKRVGGDVTSDKLDWLI SRQRYWGTP.IPIVHCPVCGPTVPVLEDLPVTLPNIASFTGK
 GGPPLAMASEWNCSPRCKGAAKRETDMDTFVDSAWYFRYTDPHNPHSPFNTAVADYWMPVDLYIGG
 KEHAVMHLFYARFFSHFCHDQKMKVHREPFHKL LAQGLIKGQTFRLPSGQYLQREEVDLTGSVPVHAKTK
 EKLEVTWEKMSKSHNGVDPEEVVEQYIDTIRLYILFAAPPEKDILWDVKT DALPGVLRWQRLWTLTT
 RFIEARASGKSPQPQLLSNKEKAEARKLWEYKNSVISQVTHFTEDFSLNSAISQLMGLSNALSQASQSV
 ILHSPEFEDALCALMVMAAPLAPHVTSEIWAGLALVPRKLC AHYTDASVLLQAWPAVDPEFLQQPEVVQ
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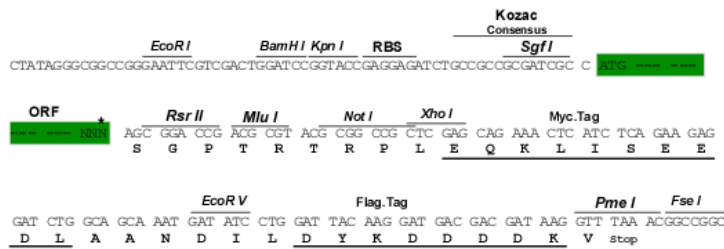
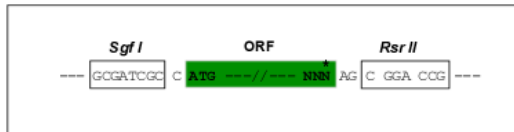
SGP TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6623_a07.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:

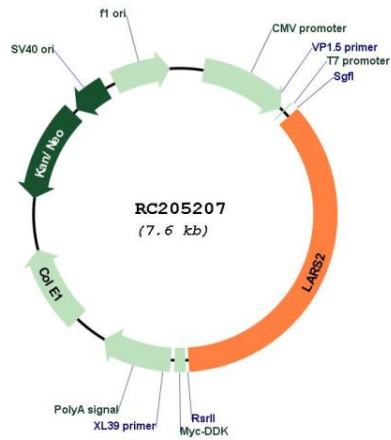


* The last codon before the Stop codon of the ORF

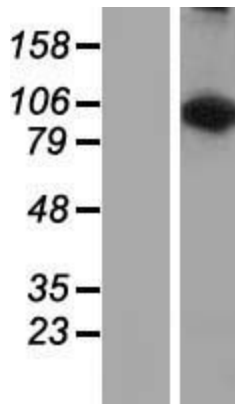
ACCN: NM_015340

ORF Size:	2709 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:	<ol style="list-style-type: none">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_015340.4
RefSeq Size:	4203 bp
RefSeq ORF:	2712 bp
Locus ID:	23395
UniProt ID:	Q15031
Cytogenetics:	3p21.31
Domains:	tRNA-synt_1
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis
MW:	102 kDa
Gene Summary:	This gene encodes a class 1 aminoacyl-tRNA synthetase, mitochondrial leucyl-tRNA synthetase. Each of the twenty aminoacyl-tRNA synthetases catalyzes the aminoacylation of a specific tRNA or tRNA isoaccepting family with the cognate amino acid. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC205207



Western blot validation of overexpression lysate (Cat# [LY414602]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205207 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).