

Product datasheet for **RG205207**

LARS2 (NM_015340) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARS2 (NM_015340) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LARS2
Synonyms:	HLASA; LEURS; mtLeuRS; PRLTS4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG205207 representing NM_015340
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTCTGTTTGGCAGAGATTGGGTTTTATGCCTCTCTTCTGAAAAGACAGCTAAATGGTGGGCCAG
 ATGTCATCAAGTGGGAAAGGAGAGTAATCCCGGATGTACCAGAAGCATCTACAGTGCCACGGGAAAGTG
 GACAAAAGAGTATACATTGCAGACAAGAAAGGATGTTGAGAAAATGGTGGCATCAACGAATAAAAGAACAG
 GCCTCCAAAATTTGAGAAGCTGATAAATCGAAGCCAAAATTTTACGTGCTTTCCATGTTCCCTTATCCTT
 CTGGTAAGCTGCACATGGGCCATGTGCGTGTCTACACCATCAGCGACACCATAGCACGGTTCAGAAAGAT
 GAGAGGGATGCAGGTCATCAACCCATGGGATGGGATGCTTTTGGATTGCCTGCTGAAAATGCCGCAGTC
 GAGAGGAATCTACATCCACAAGTTGGACACAAGTAATATTAACACATGAGGAAACAGCTTGATCGTC
 TGGGCTGTGTTTTCAGCTGGGATAGGGAATAACTACGTGTTTGGCAGATTACTACAAGTGGACTCAGTA
 TCTCTTTATTAAGTGTATGAGGCTGGGCTGGCCTATCAAAGGAGGCCCTGGTTAACTGGGACCCAGTG
 GATCAAACAGTGTCTGCCAATGAGCAGGTGGATGAACATGGCTGTTTCATGGCGTTCTGGAGCAAAGTGG
 AACAGAAGTACCTCAGACAATGGTTTATTAAGACAACCGCTTATGCAAAGGCCATGCAGGACCGCTTGGC
 AGACCTTCCAGAATGGTATGGAATAAAGGCATGCAAGCCACTGGATTGGGGACTGTGTGGGCTGCCAC
 CTGGACTTACATTAAGGTTTATGGGCAAGCCACGGGCGAAAAGCTGACTGCCTATACGGCCACCCCTG
 AAGCCATTTATGGCACCTCCACGTGGCCATCTCGCCAGCCACAGACTCCTACATGGGCACAGCTCTCT
 GAAGGAAGCCTTGGGATGGCCCTGTCCCTGGCAAAGATTGCCTCACGCTGTAATGGCTGTGAACATG
 CTCACCCAGCAGGAGTCCCTGTGTTATTTGGCCAAAGCTGACTTGAAGGCTCTCTGGATTCAAAAA
 TAGGAATCCCAGTACTAGCTCAGAGGACACCATCTTAGCCCAAACCCCTGGGCTGGCCTACTCTGAAG
 CATTGAAAATTTGCCAGATGGCACAGAGAGACTGAGCAGCTCTGCTGAGTTCACAGGTATGACCCGGCAG
 GATGCTTTTCTAGCCCTGACTCAGAAAGCCCGGGGAAGAGAGTGGGTGGAGACGTGACAAGTGATAAAC
 TGAAAGACTGGCTGATTTACGGCAGCGGTACTGGGCGACACCAATCCCCATTGTCCACTGCCAGTCTG
 TGGCCCCACACCTGTGCCCTGGAGGACTTGCCTGTGACCCTGCCAACATCGCATCTTTACTGGCAAG
 GGAGGCCCCCACTGGCCATGGCTTTCAGAGTGGGTGAAGTGCCTGCCAAGGTGCAAGGGAGCAGCCA
 AGAGAGAGACAGACAGTGGATACCTTTGTTGATTCTGCTTGGTACTACTTCAGATACACTGACCCCTCA
 TAATCCACACAGCCCTTTAACACAGCAGTGGCCGATTACTGGATGCCTGTGGATTTGTACATTGGAGGG
 AAAGAACATGCCGTCATGCACCTTGTCTATGCAAGATTCTTAGTCATTTTTGCCATGATCAAAAAATGG
 TTAACATAGGGAGCCTTTTCATAAGCTGCTGGCCCAAGGCCATTCAAGGGGCAGACATCCCGCTACC
 ATCTGGACAGTATCTACAGAGAGAGGAAGTGGATCTCACAGGTTCCGTTCTCTGTTTCATGCAAAAACGAAA
 GAGAAGTTAGAGGTGACGTGGGAGAAGATGAGTAAGTCCAAACACAACGGGGTGGACCCAGAGGAAGTTG
 TGGAGCAGTATGGGATCGACACGATTCCGGCTCTACATCTTTTTGCTGCCCTCTGAGAAGGATATCTT
 GTGGGATGTGAAAATGATGCTCTCCCTGGGGTGTGAGATGGCAACAACGACTGTGGACCTTGACAAC
 CGGTTTATTGAGGCCAGGGCTTCTGGGAAGTCTCCCCAGCCTCAGCTGCTGAGTAACAAGGAGAAAGCCG
 AGGCCAGGAAGCTCTGGGAGTACAAGAACTCCGTCATCTCAGGTGACCACCCATTTACAGAGGACTT
 CTCACTGAATTTGCAATTTCTCAGCTGATGGGACTCAGCAATGCCCTCTCGCAAGCCTCTCAGAGCGTC
 ATTCTCCACAGCCCCGAGTTTGGAGATGCTTTGTGTGCCCTGATGGTGATGGCTGTCTCCACTGGCCCTC
 ATGTAACCTCAGAGATCTGGCAGGCTGGCGCTGGTGGCCGAGGAAGCTCTGTGCCCACTACACTTGGGA
 TGCCAGTGTGCTGCTCCAGGCATGGCCTGCTGTGGACCCGGAGTTCCTGCAGCAGCTGAGGTTGTCCAG
 ATGGCAGTTCTGATCAACAATAAAGCTTGTGGCAAAATTCCTGTGCCCAACAAGTTGCCCGGGACCAGG
 ACAAGTCCACGAATTTGTTCTTCAAAGCAGCTGGGTGTGAGGCTTTTGAAGGACGAAGCATCAAGAA
 GTCCTTCTTTCCCGAGAAGTGCCTCATCAACTTCTGGTGAAGAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence: >RG205207 representing NM_015340
 Red=Cloning site Green=Tags(s)

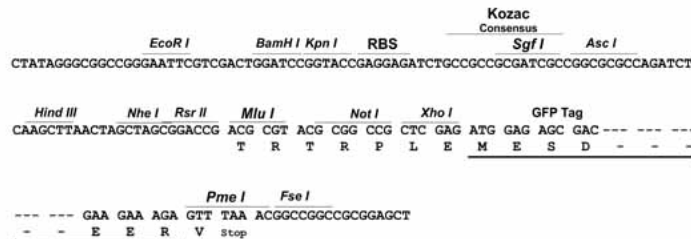
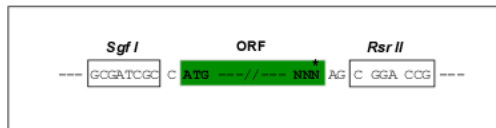
MASVWQRLGFYASLLKRQLNGGPDVIKERRVIPGCTRSIYSATGKWTKEYTLQTRKDVEKWWHQRIKEQ
 ASKISEADKSKPKFYVL SMFPYPSGKLMGHVRYVTISDTIARFQKMRGMQVINPMGWDAFGLPAENAAV
 ERNLHPQSWTQSNIKHMRKQLDRLGLCFSDWREITTCCLPDYKWTQYLF IKLYEAGLAYQKEALVNWDPV
 DQTVLANEQVDEHGCSWRSGAKVEQKYLQWF IKTTAYAKAMQDALADLPEWYGIKGMQAHWIGDCVGC
 LDFTLKVHGQATGEKLTAYTATPEAIYGTSHVAISPSHRL LHGSSLKEALRMALVPGKDCLTPVMAVNM
 LTQQEVPVVILAKADLEGLSDSKIGIPSTSSDITILAQTLGLAYSEVIETLPDGTERLSSSAEFTGMTRQ
 DAF LALTQKARGKRVGGDVTSDKLDWLI SRQRYWGTP.IPIVHCPVCGPTPVPLEDLPVTLPNIASFTGK
 GGPPLAMASEWVNCSPRCKGAARKRETDMTDFVDSAWYFRYTDPHNPHSPFNTAVADYWMPVDLYIGG
 KEHAVMHLFYARFFSHFCHDQKMKVHREPFHKL LAQGLIKGQTFRLPSGQYLQREEVDL TGSVPVHAKTK
 EKLEVTWEKMSKSHNGVDPEEVVEQYIDTIRLYILFAAPPEKDILWDVKT DALPGVLRWQRLWTLTT
 RFIEARASGKSPQPQLL SNKEKAEARKLWEYKNSVISQVTTHTFEDFSLNSAISQLMGLSNALSQASQSV
 ILHSPEFEDALCALMVMAAPLAPHVTSEIWAGLALVPRKLC AHYTWASVLLQAWPAVDPEFLQQPEVVQ
 MAVLINNKACGKIPVPQQVARDQDKVHEFVLQSELGVRL LQGRSIIKKSFLSPRTALINFLVQD

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

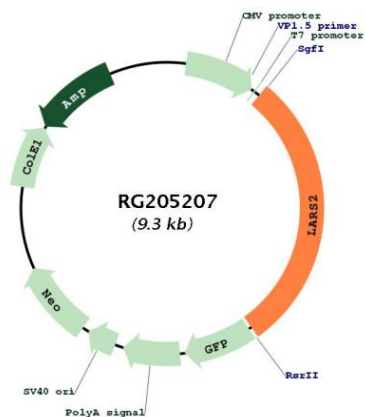
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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_015340.3 , NP_056155.1
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
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 RG205207