

Product datasheet for **MG209505**

Kars (BC035324) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kars (BC035324) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kars
Synonyms:	AA589550; AL024334; AL033315; AL033367; D8Erttd698e; D8Wsu108e; LysRS; mKIAA0070
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209505 representing BC035324
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGCAAGCTGCTGTCAGGCTTGTAGGGGGCCCTGCGCCAAACCTCATGGGCAGAATGGGGTCAGAGGG
 AACTTCGACTGGGCCACCTTGCTCCTTTACAACGCTCCACAAGGACCAGCCACTTTCTGATAGAAGAAG
 TGAGCTGAAGAGGCGTCTGAAAGCTGAGAAGAACTGGCAGAGAAGGAGGCCAAGCAGAAAAGAGCTGAGT
 GAGAAACAGCTAAACCAGACTGCTTCCGCTCCCAACCACACGGCTGACAATGGCGTGGGTGCTGAGGAGG
 AGACTCTGGACCAAAATCAATACTACAAGATCCGAAGTCAAGCCGTCCAGCAGCTGAAGGTCACTGGGGA
 GGATCCGTACCCACACAAGTTCACGTGGACATCTCACTCACTCAGTTTATCCAAGAATATAGTCACCTG
 CAGCCTGGGGACCACCTGACTGATGTACCCTCAAAGTGGCAGGCCGCATCCACGCCAAGAGGGCCTCTG
 GAGGGAAGCTCATCTTCTATGACCTGCGAGGAGAGGGGGTCAAGTTACAAGTCATGGCCAACTCCAGGAA
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 GCTTGACATGCTGCCTCATCTTCACTTTGGCCTCAAAGACAAGGAAACACGGTATCGTCAAAGATACTT
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 AGTTTCTTGATGAGCTGGGCTTCTAGAGATCGAACTCCCATGATGAACATCATTCCCGGGGAGCTG
 TGGCCAAGCCTTTCATCACCTATCAATGAGCTGGACATGAACCTGTATATGAGAATTGCTCCAGAACT
 CTACCACAAGATGCTGGTGGTGGTGGCATTGACCGGGTTTATGAAATTGGGCGCCAGTTCGGAACGAA
 GGGATTGATTGACTACAATCCTGAGTTCACCACCTGTGAGTTCTACATGGCCTATGCAGACTATCATG
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 GCTCCTTGATAAGCTCGTTGGCGAGTTCCTCGAAGTCACATGCATCAGCCCTACCTTCATCTGTGATCAC
 CCACAGATCATGAGTCTTTGGCCAAATGGCACCCTCCAAAGAGGGTCTCACGGAGCGCTTTGAGCTGT
 TTGTCATGAAGAAGGAGATATGCAATGCCTATACTGAGCTGAATGACCCCGTGGGCAGAGGCAGCTGTT
 TGAGGAGCAGGCCAAGGCCAAGGCTGCCGTGATGACGAGGCCATGTTTCATAGACGAGAAGTCTGTACT
 GCCCTGGAATACGGGCTGCCTCCACAGCGGGCTGGGGCATGGGCATTGATCGGCTCACCATGTTTCTCA
 CCGATTCCAACAATATCAAGGAAGTACTTCTGTTTCTGCCATGAAGCCAGAGGACAAGAAGGAACTGC
 AGCGACCACTGAAACCCAGAGAGCACAGAGGCCAGCCCCCTGTGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

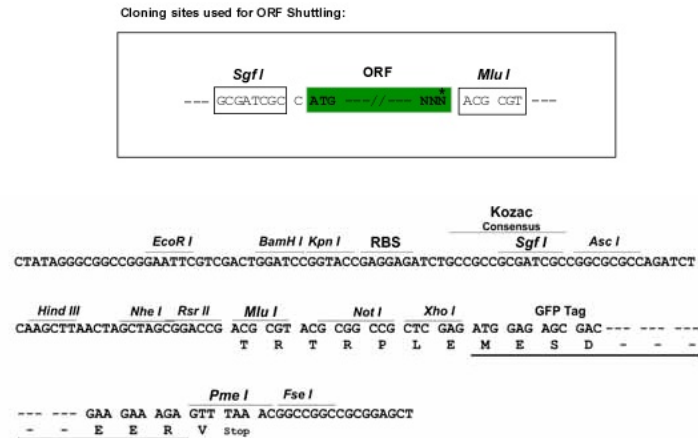
>MG209505 representing BC035324
 Red=Cloning site Green=Tags(s)

MQAAVRLVRGALRQTSWAEWQRELRLGHLAPFTTLHKDQPLSDRRSELKRRLKAEKKLAEKEAKQKELS
 EKQLNQTSAPNHTADNGVGAEEETLDPNQYYKIRSQAVQQLKVTGEDPYPHKFHVDISLTQFIQEYSHL
 QPGDHLTDVTLKVAGRIHAKRASGGKLIFYDLRGEGVKLQVMANSRNYKSEEFVHINNKLRRGDIIGVE
 GNPCKTKKGELSIIPQEITLLSPCLHMLPHLHFLGDKETRYRQRYLDLILNDFVRQKFIVRSKIITYIR
 SFLDELGFLEIETPMNIIIPGAVAKPFITYHNELDMNLYMRIAPELYHKMLVGGIDRVYEIGRQFRNE
 GIDLTHNPEFTTCEFYMAYADYHDLMEITEKMLSGMVKSITGSYKITYHPDGPEGQAYEVDFTPPFRRIS
 MVEELEKALGVKLPETSLFETEETRKILDDICVAKAVECPPPRTTARLLDKLVGEFLEVTCISPTFICDH
 PQIMSPALAKWHSKEGLTERFELFVMKKEICNAYTELNDPVRQQLFEEQAKAKAAGDDEAMFIDENFCT
 ALEYGLPPTAGWGMIDRLTMFLTDSNNIKEVLLFPAMKPEDKKETAATTETPESTEASPSV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: BC035324

ORF Size: 1866 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: [BC035324](#), [AAH35324](#)

RefSeq Size: 2146 bp

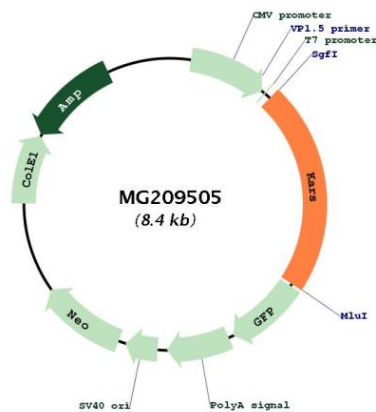
RefSeq ORF: 1868 bp

Locus ID: 85305

Cytogenetics: 8 58.27 cM

Gene Summary: Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA. When secreted, acts as a signaling molecule that induces immune response through the activation of monocyte/macrophages. Catalyzes the synthesis of the signaling molecule diadenosine tetraphosphate (Ap4A), and thereby mediates disruption of the complex between HINT1 and MITF and the concomitant activation of MITF transcriptional activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209505