

Product datasheet for **MG209528**

Kars (BC027356) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kars (BC027356) 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:

>MG209528 representing BC027356
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGTTGATGCAAGCTGCTGTCAGGCTTGTAGGGGGCCCTGCGCCAAACCTCATGGGCAGAATGGGTC
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 AAGAAGTGAGCTGAAGAGGCGTCTGAAAGCTGAGAAGAACTGGCAGAGAAGGAGGCCAAGCAGAAAGAG
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 AGGAGGAGACTCTGGACCCAAATCAATACTACAAGATCCGAAGTCAAGCCGTCCAGCAGCTGAAGGTCAC
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 CCTCTGGAGGGAAGCTCATCTTCTATGACCTGCGAGGAGAGGGGGTCAAGTTACAAGTCATGGCCAACTC
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 TGTACTGCCCTGGAATACGGGCTGCCTCCACAGCGGGCTGGGGCATGGGCATTGATCGGCTCACCATGT
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

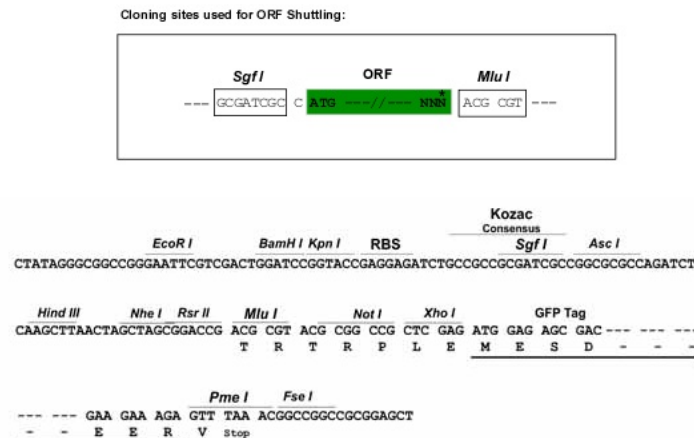
>MG209528 representing BC027356
 Red=Cloning site Green=Tags(s)

MLMQAAVRLVRGALRQTSWAEWQRELRLGHLAPFTTLHKDQPLSDRRSELKRRLKAEKKLAEKEAKQKE
 LSEKQLNQ TASAPNHTADNGVGAEETLDPNQYYKIRSQAVQQLKVTGEDPYPHKFHVDISLTQFIQEYS
 HLQPGDHLTDVTLKVAGRIHAKRASGGKLIFYDLRGEGVKLQVMANSRNYKSEEEFVHINNKLRRGDIIG
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 ISMVEELEKALGVKLPETSLFETEETRKILDDICVAKAVECPPPRTTARLLDKLVGEFLEVTCISPTFIC
 DHPQIMSLAKWHRKEGLTERFELFVMKKEICNAYTELNDPVRQRQLFEEQAKAKAAGDDEAMFIDENF
 CTALEYGLPPTAGWGMGIDRLTMFLTDSNNIKEVLLFPAMKPEDKKETAATTETPESTEASPSV

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: BC027356

ORF Size: 1872 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: [BC027356.1](#)

RefSeq Size: 2205 bp

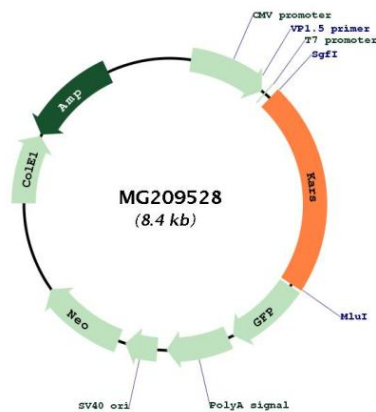
RefSeq ORF: 1874 bp

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 MG209528