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Product datasheet for RN211422

Kars (NM_001006967) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kars (NM_001006967) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Kars
Synonyms:	LysRS; MGC94484
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>RN211422 representing NM_001006967
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGATGCAAGCTGCTGTCAGGCTTGTTAGGGGGTCCCTGCGCCAAACCTCATGGGCAGAATGGGGTC
AGAGGGAACTTCGACTGGGCCAACTTGCTCCTTTCACAACGCTCCGCAAGGACAAGCCACTTTCTGATAG
AAGAAGTGAGCTGAAGAGGCGTCTGAAAGCTGAGAAGAAGCTGGCAGAGAAAGAGGCCAAGCAGAAAGAG
CTCAGTGAAAAGCAGCTAAACCAGACGACTGCTGCTGCTGCCACCAACCATACTGCTGACAATGGTGTGG
GTGCTGAAGAGGAGACCCTGGACCCAAACCAATACTACAAGATCCGTAGTCAAGCTGTCCAGCAGCTGAA
GGTCAGTGGGGAGGACCCGTACCCACACAAGTTCCATGTGGACATCTCACTCACTCAGTTCATCCAAGAA
TACAGTCACCTGCAGCCTGGGGACCACCTGACTGACATCACCTTAAAAGTAGCAGGTCGCATCCACGCCA
AGAGAGCCTCTGGGGGAAAGCTCATCTTCTATGACCTTCGAGGAGAGGGGGTCAAGTTACAAGTCATGGC
CAACTCCAGGAATTATAAATCAGAGGAAGAATTCGTTCACATCAATAACAAACTGCGCAGGGGAGACATA
ATCGGAGTCGAGGGCAATCCCGGAAAAACCAAGAAGGGTGAGCTGAGCATCGTCCCCCGGGAGATGACAC
TCCTGTCCCCCTGCTTGCACATGCTGCCTCATCTTCACTTCGGCCTCAAGGACAAGGAAACAAGGTATCG
TCAGAGATACTTGGACTTGATACTGAACGACTTTGTGAGGCAGAAGTTTATCATCCGCTCTAAGATCATC
ACATATATAAGAAGTTTCTTGGACGAGCTGGGATTCCTAGAGATCGAGACTCCCATGATGAACATCATCC
CCGGGGGAGCTGTGGCCAAGCCTTTCATCACCTACCACAACGAGCTGGACATGAACCTGTACATGAGAAT
TGCTCCAGAGCTCTACCACAAGATGCTGGTGGTTGGTGGCATTGACCGGGTTTATGAAATTGGGCGCCAG
TTCCGGAACGAAGGGATTGATTTGACTCACAATCCTGAGTTCACCACCTGTGAGTTCTACATGGCCTATG
CAGACTATCATGACCTCATGGAAATCACAGAGAAGATGCTGTCAGGGATGGTGAGAAGCATCACAGGCAG
TTACAAGATCACCTATCACCCAGATGGGCCAGAAGGCCAAGCCTATGAGATTGACTTCACCCCACCCTTC
CGAAGAATCAGCATGGTAGAAGAGCTTGAGAAGGTTCTGGGCGTGAAGCTGCCAGAAACCAGTCTCTTTG
AGACCGAAGAAACTCGCAAAATTCTCGATGATATTTGTGTTGCAAGGGCTGTTGAATGCCCCCCACCTCG
GACCACAGCCAGGCTCCTTGATAAGCTTGTGGGAGAGTTCCTCGAAGTGACATGCATCAGCCCTACATTC
ATCTGTGATCACCCACAGATCATGAGTCCTCTGGCCAAATGGCACCGTTGCAAAGAGGGTCTAACTGAGC
GCTTCGAGCTGTTTGTCATGAAGAAGGAAATATGCAATGCGTACACTGAGCTGAACGACCCCGTGCGGCA
GAGACAACTGTTTGAAGAACAGGCCAAGGCCAAGGCTGCTGGTGACGATGAGGCCATGTTCATAGATGAG
AACTTCTGTACTGCCCTGGAGTACGGGCTGCCCCCAACAGCTGGCTGGGGCATGGGTATCGACCGAGTCA
CCATGTTTCTCACAGACTCCAACAATATCAAGGAAGTACTTCTCTTTCCTGCCATGAAGCCTGAAGACAA
GAAGGAAACTGCAACAGCCACCGAGACCCCAGAAAGCACAGAGGCCAGCCCCTCTGTCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001006967

Insert Size: 1881 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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.
RefSeq:	NM_001006967.1, NP_001006968.1
RefSeq Size:	2168 bp
RefSeq ORF:	1881 bp
Locus ID:	292028
UniProt ID:	Q5XIM7
Cytogenetics:	19q12
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 (PubMed:6315704). When secreted, acts as a signaling molecule that induces immune response through the activation of monocyte/macrophages (By similarity). 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 (PubMed:3988754, PubMed:2995387, PubMed:19524539).[UniProtKB/Swiss-Prot Function]