

Product datasheet for **RR211422L4V**

Kars (NM_001006967) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Kars (NM_001006967) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Kars
Synonyms:	LysRS; MGC94484
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001006967
ORF Size:	1878 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR211422).
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.
RefSeq:	NM_001006967.1 , NP_001006968.1
RefSeq Size:	2168 bp
RefSeq ORF:	1881 bp
Locus ID:	292028
UniProt ID:	Q5XIM7
Cytogenetics:	19q12



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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]