

Product datasheet for **MR211342**

Aars (NM_146217) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aars (NM_146217) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aars
Synonyms:	A1316495; C76919; sti
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR211342 representing NM_146217
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGCCACTTTAACAGCAGAGAGATCCGAGAGCGGTTTATAAATTTCTTCAGACGAAATGAGCACA
 CCTATGTCCACTTTCGCCACCATCCCTCTGGATGACCCCACTCTGCTTTCGCCAACGCTGGCATGAA
 CCAGTTCAAACCCATCTTCTAAACACAATCGACCCATCTCACCCATGCGAAGCTGAGCAGAGCTGCC
 AATACCCAGAAATGCATCCGAGCTGGGGCAAGCACAACGACCTGGATGACGTGGCAAGGATGTCTACC
 ACCACACTTTCTTTGAGATGCTGGGCTCCTGGTCTTTGGGGACTATTTCAAGGAATTGGCATGTAAGAT
 GGCCCTGGAACCTCTTACCCAGGAGTTTGGTATCCAGTTGAAAGACTCTATGCTCACTTACTTTGGTGGT
 GATGAGGCGGCCGCTAGAGCCAGATCTGGAGTGCAGACAGATTTGGCAAAATTTAGGACTGGATGAAG
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 CCATCACTGTGGCGCTGGCTGATGGCGGCCGCTGACAACACAGGACGGGGTACGTGCTGAGACGGAT
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 GATGTTGTCGTTCAATCCCTGGGAGACGATTTCTGAGCTGAAGAAGGACCCAGAGATGGTGAAGGACA
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 TCAGAGCTTAGGAGACTGCAAAACCATCCAGGTGACACCGCTTGGCTCCTCTATGATACTTATGGATT
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 TTACGCTATTGAAGAGCTCCGGGCAAAGGGTTGGAGGCCACAGATGATTCTCAAAGTATAACTACCAA
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 TGTTTGTGGACGAGGTGGTCACTGGCCAGGAGTGTGGAGTGGTGTGACAAAGACCTGTTTCTATGCGGA
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 TACACACATCCTCAACTTCGCCTTGCCTCGGTGCTTGGGGAAGCGGACCAGAAAGGTTCACTGGTTGCT
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 AGATTGTCAATGGCATGATTGAGGCAGTAAGCCTGTCTACACCCAGGATTGTCCCTGGCAGCAGCAAA
 AGCCATCCAGGGCCTTCGAGCTGTGTTGATGAGACCTATCCTGACCCGTTTCGAGTCTGCTCCATTGGG
 GTCCCGTGTGAGAGCTGCTGGATGACCCGTGTGGCCTGCTGGTCCCTTACTTCTGTTGAGTTCTGTG
 GAGGAACACATCTACGAATCTAGCCACGCAGGCGCTTTGTGATAGTGACAGAAGAAGCTATTGCCAA
 GGGTATCCGGAGGATTGTTGCTGCACAGGTGCTGAAGCCAGAAGGCTCTCAGGAAGTCAGAAACCTTG
 AAGAAATCTCTCTGCCATGGAGGCAAAGTGAAGGCCAGACTGCACCAACAAGGACGTGCAGAGGG
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 GACTCTGAAGTCCCTGAAGAAAGTCAAGGATGACCTAGACCGGGCCAGCAAGGCCGATGTGCAGAAGCGA
 GTGTTAGAGAAGACAAAGCAGCTGATTGACAGCAACCCCAACAGCCGCTGGTCACTCCTGGAGATGGAGA
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 CATGCTGTTACGGTGGACAATGAGGCTGGCAAGATCACGTGCTTGTGCCAGGTTCCCCAGAATGCAGCC
 AACCGGGGACTGAAAGCCAGCAGTGGTCCAGCAGGTTTCAAGCCTGATGGATGGTAAAGCGGTGGCA
 AGGACATGTCGCCAGGCCACAGGCAAGAACGTGGGCTGCCTCAGGAAGCACTGCAGTGGCTACCTC
 CTTGCCAGCTCCGTCTGGGAGATGTGAAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211342 representing NM_146217
 Red=Cloning site Green=Tags(s)

MDATLTAREIRERFINFFRRNEHTYVHSSATIPLDDPTLLFANAGMNQFKPIFLNTIDPSHPMAKLSRAA
 NTQKCIRAGGKHNDLDDVGKDVYHHTFFEMLGSWSFGDYFKELACKMALELLTQEFGIPVERLYVTFYGG
 DEAAAGLEPDLECRQIWQNLGLDEARILPGNMKDNFEMGDTGPCGPCSEIHYDRIGGRDAAHLVNQDDPN
 VLEIWNLVFIQYNRESGVLPKPKSIDTGMGLERLVSVLQNKMSNYDTDLFMPYFEAIQKGTGARPYT
 GKVGAEDADGIDMAYRVLADHARTITVALADGGRPDNTGRGYVLRRLRRAVRYSHEKLNASRGFFATLV
 DVVVQSLGDAFPELKKDPEMVKDIINEEEVQFLKTL SRGRRILDRKIQSLGDCKTIPGDTAWLLYDTYGF
 PVDLTGLIAEEKGLVVDMNGFEEERRLAQLKSQKGAGDEDLIMLDIYAEELRAKGLEATDDSPKYNYQ
 SDSSGSYVFECTVATVLRREKMFVDEVVVGQECGVVLDKTCFYAEQGGQIYDEGYLVKVVDDSSSEDKTE
 FTVKNAQVRGGYVLHIGTIYGNLKVGDQVRLFIDEPRRPPVMSNHTATHILNFALRSVLGEADQKGLVA
 PDRLRFDF TAKGAMSTQIQKAAEIVNGMIEAAKPVYTQDCPLAAAKAIQGLRAVFDETYDPVVRVVSIG
 VPVSELDDPCGPAGSLTSVEFCGGTHLRNSSHAGAFVIIVTEEIAKGI RRI VAVTGAEAQKALRKSETL
 KKSLSAMEAKVKAQTAPNKDVQREIADLGEALATAVIPQWQKDEQRETLKSLKKVMDDLDRASKADVQKR
 VLEKTKQLIDSNPQPLVILEMESGASAKALNEALKLFTKTHSPQTSAMLFVTDNEAGKITCLCQVPQNA
 NRGLKASEWVQQVSGLMDGKGGKDMAQATGKNVGLQEALQLATSFAQLRLGDVKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

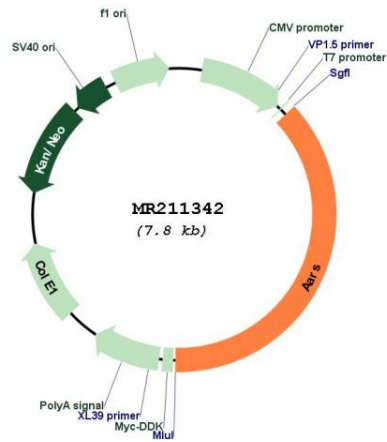


ACCN: NM_146217

ORF Size: 2907 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_146217.4 , NP_666329.2
RefSeq Size:	3728 bp
RefSeq ORF:	2907 bp
Locus ID:	234734
UniProt ID:	Q8BGQ7
Cytogenetics:	8 E1
MW:	106.9 kDa
Gene Summary:	Catalyzes the attachment of alanine to tRNA(Ala) in a two-step reaction: alanine is first activated by ATP to form Ala-AMP and then transferred to the acceptor end of tRNA(Ala) (PubMed:16906134, PubMed:20010690, PubMed:25422440, PubMed:27622773). Also edits incorrectly charged tRNA(Ala) via its editing domain (PubMed:16906134, PubMed:20010690, PubMed:25422440, PubMed:29769718).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211342