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Product datasheet for MR219930

Aars2 (NM_198608) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aars2 (NM_198608) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aars2
Synonyms:	Aarsl; AlaRS; Gm89
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR219930 representing NM_198608
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGTGGCGTTGGCTGCCGCAGCCGGTAAGCTGCGGCGAGCCATTGGGAGGTCGTGCCCATGGCAGC
CTTTCTCAACCGAGCCCGGTCCACCCCACGGAGCGGCCGTGCGGGACGCCTTCCTGAGCTTCTTCCGAGA
TCGCCACGGCCACCGGCTCGTGCCCTCCGCTACCGTGAGGCCGCGCGGCGACCCCAGCCTGCTTTTCGTC
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GCACCTGCTAAGTACCGGGGCCGTGGGAGACTTGGTGATCATTGGGGAACGGCAGCTGGTCAAGGGCATC
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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR219930 representing NM_198608
Red=Cloning site Green=Tags(s)

MAVALAAAAGKLRRAIGRSCPWQPFSTEPGPPHGAAVRDAFLSFFRDRHGHRLVPSATVRPRGDPSLLFV
NAGMNQFKPIFLGTVDPRSEMAGFRRVVNSQKCVRAGGRHNDLEDVGRDLSHHTFFEMLGNWAFGGEYFK
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TDLFSPLLDAIHQSCGAPPYSGRVGAADEGRIDTAYRVVADHIRTLSVCIADGVSPGMSGAPLVLRRILR
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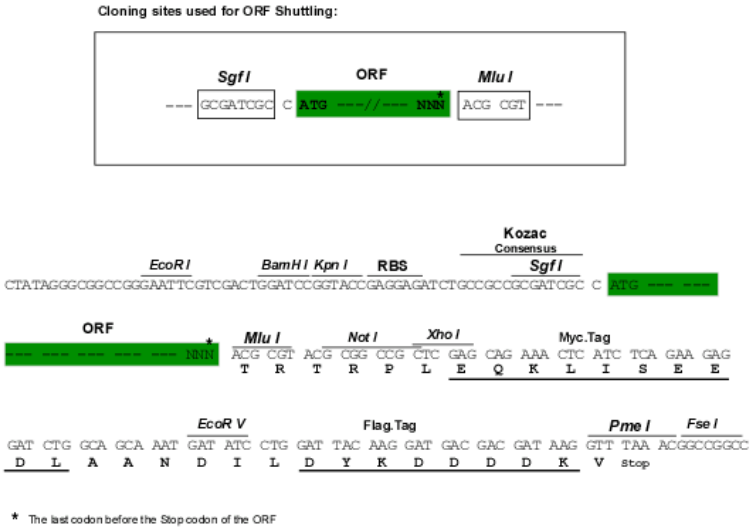
VHALEELHRQGIPTTDDSPKYNYTLHPNGDYEFGLCEARVLQLYSETGTAVASVGAGQRCGLLLDRTNFY
AEQGGQASDRGYLVRTGQQDMLFPVAGAQLCGGFILHEAMAPERLQVGDQVQLYVDKAWRMGCMVKHTAT
HLLSWALRQTLGPTTEQRGSHLNPERLRFDVATQTLLTTEQLRTVESYVQEVVGQDKPVFMEEVPLAHTA
RIPGLRSLDEVYPDPVRVVSVGVPVAHALGPASQAAMHTSVELCCGTHLLSTGAVGDLVIIGERQLVKGI
TRLLAITGEQAQQAREVGQSLSQEVEAASERLSQGSRDLPEAHRLSKDIGRLTEVAESAVIPQWQRQELQ
TTLKMLQRRANTAIRKLEKGQATEKSQELLKRHSEGPLIVDTVSAESLSVLVKVVRQLCKQAPSISVLLL
SPQPTGSVLCACQVAQDATPTFTAEAWALAVCSHMGGKAWGSRVVAQGTGHTADLEAALGTARAYALSQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9098_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

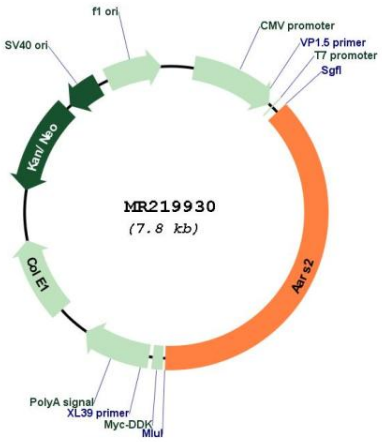


ACCN: NM_198608

ORF Size: 2940 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.
RefSeq:	NM_198608.2, NP_941010.2
RefSeq Size:	3368 bp
RefSeq ORF:	2943 bp
Locus ID:	224805
UniProt ID:	Q14CH7
Cytogenetics:	17 B3
MW:	106.8 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). Also edits incorrectly charged tRNA(Ala) via its editing domain.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219930