

Product datasheet for SC119146

AlaRS (AARS) (NM_001605) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AlaRS (AARS) (NM_001605) Human Untagged Clone
Tag:	Tag Free
Symbol:	AlaRS
Synonyms:	AARS; CMT2N; DEE29; EIEE29
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119146 sequence for NM_001605 edited (data generated by NextGen Sequencing)

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ATGGACTCTACTCTAACAGCAAGTGAAATCCGGCAGCGATTTATAGATTTCTTCAAGAGG
AACGAGCATACGTATGTTCACTCGTCTGCCACCATCCCATTGGATGACCCCACTTTGCTC
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CTCCTCACCAAGAGTTTGGCATTCCCATTGAAAGACTTTATGTTACTTACTTTGGCGGG
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ACAGATGATCCCAAGTACAATTACCATTTGGACTCCAGTGGTAGCTATGATTTGAG

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Clone variation with respect to NM_001605.2
2715 t=>c

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_001605 unedited
NGGAACGGTTCAAATTTGTAAACGACTCACTATAGCGCGCCGNAATTCGCACGAGTA
CAGCTGCGCGTCTGCGGGAATAGGTGCAGCGGGCCCTTGCGGGGGACTCTGAGGGAGGA
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TCCTTGCAGTGAGATCCACTACGACCGGATTGGTGGTCCGGACGCCGCACATCTTGTCAA
CCAGNACGACCCTAATGTGCTGGAGATCTGGAACNCTGTGTCATCCAGTATAACAGGGA
AGCTGATGGCATTCTGAAACCTTCCCAANAAAGCATTGC
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Protein Pathways: Aminoacyl-tRNA biosynthesis

Gene Summary: The human alanyl-tRNA synthetase (AARS) belongs to a family of tRNA synthetases, of the class II enzymes. Class II tRNA synthetases evolved early in evolution and are highly conserved. This is reflected by the fact that 498 of the 968-residue polypeptide human AARS shares 41% identity with the E.coli protein. tRNA synthetases are the enzymes that interpret the RNA code and attach specific amino acids to the tRNAs that contain the cognate trinucleotide anticodons. They consist of a catalytic domain which interacts with the amino acid acceptor-T psi C helix of the tRNA, and a second domain which interacts with the rest of the tRNA structure. [provided by RefSeq, Jul 2008]