

Product datasheet for **RG223715**

Alanyl tRNA synthetase 2 (AARS2) (NM_020745) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Alanyl tRNA synthetase 2 (AARS2) (NM_020745) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Alanyl tRNA synthetase 2
Synonyms:	AARSL; COXPD8; LKENP; MT-ALARS; MTALARS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG223715 representing NM_020745
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG223715 representing NM_020745
 Red=Cloning site Green=Tags(s)

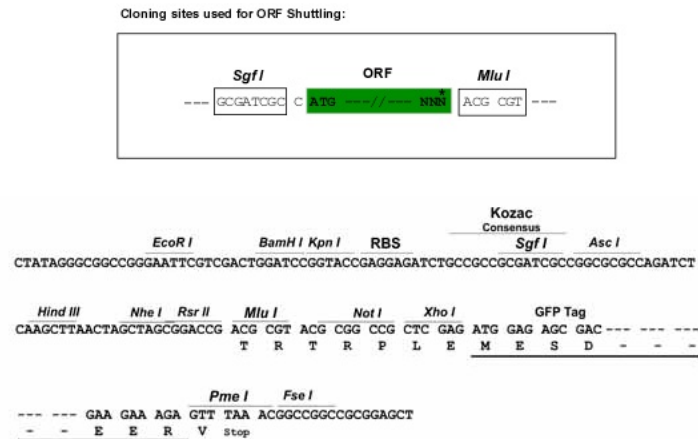
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 ALSQL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

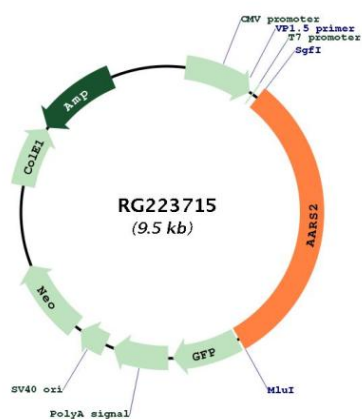


ACCN: NM_020745

ORF Size: 2955 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_020745.2
RefSeq Size:	4096 bp
RefSeq ORF:	2958 bp
Locus ID:	57505
UniProt ID:	Q5J TZ9
Cytogenetics:	6p21.1
Protein Pathways:	Aminoacyl-tRNA biosynthesis
Gene Summary:	The protein encoded by this gene belongs to the class-II aminoacyl-tRNA synthetase family. Aminoacyl-tRNA synthetases play critical roles in mRNA translation by charging tRNAs with their cognate amino acids. The encoded protein is a mitochondrial enzyme that specifically aminoacylates alanyl-tRNA. Mutations in this gene are a cause of combined oxidative phosphorylation deficiency 8. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RG223715