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Product datasheet for RG232285

NARS2 (NM_001243251) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NARS2 (NM_001243251) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NARS2
Synonyms:	asnRS; DFNB94; SLM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG232285 representing NM_001243251
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAGGAGCTTTTACTCAAGTGTTTACCTTTGGTCCGACCTTCCGAGCTGAAAATTCTCAGAGCCGGA
GGCACCTGGCAGAGTTTTATATGATAGAAGCAGAGATTTCTTTTGTTGACAGCCTTCAAGATCTTATGCA
GGTTATAGAGGAACTGTTCAAGGCTACAACAATGATGGTTCTCTCAAAATGTCCTGAAGATGTTGAACTC
TGTCACAAATTCATAGCACCTGGCCAAAAGGACAGATTAGAACATATGCTAAAAAACAACTTTTTAATCA
TTTCTTATACTGAAGCAGTGGAGATCTTAAAGCAAGCATCCCAGAACTTCACCTTTACCCCAGAGTGGGG
TGCTGACCTACGGACTGAACATGAAAAGTACCTGGTGAAGCACTGTGGCAACATACCTGTCTTCGTTATT
AATTATCCATTAACACTCAAGCCTTTCTACATGAGGGATAATGAAGATGGCCCTCAGCACACGGTTGCTG
CTGTTGATCTTCTGGTTCCTGGAGTTGGGGAACTCTTTGGAGGAGGCCTCAGAGAAGAACGATACCATTT
CTTAGAGGAGCGCTTAGCCAGATCGGGACTTACAGAAGTCTACCAATGGTATCTGGACCTTCGTCGATTT
GGATCTGTGCCACATGGAGGTTTTGGGATGGGATTTGAACGCTACCTGCAGTGCATCTTGGGTGTTGACA
ATATCAAAGATGTTATCCCTTTCCCAAGGTTTCCTCATTCATGCCTTTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

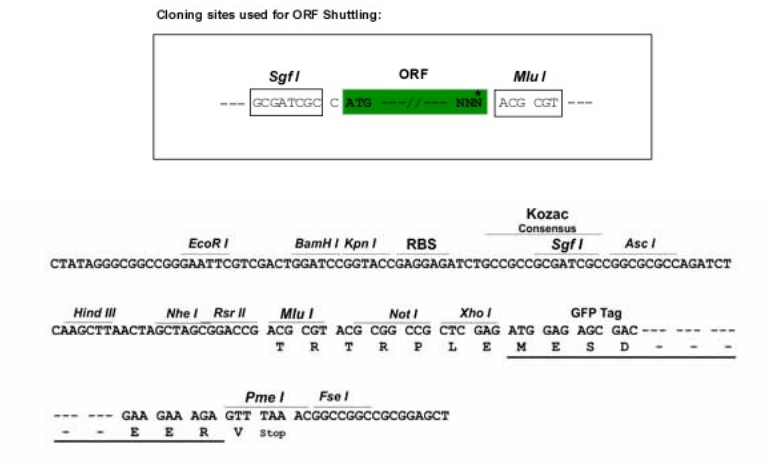
>RG232285 representing NM_001243251
Red=Cloning site Green=Tags(s)

MSGAFTQVFTFGPTFRAENSQSRRHLAEFYMIEAEISFVDSLQDLMQVIEELFKATTMMVLSKCPEDVEL
CHKFIAPGQKDRLEHMLKNNFLIISYTEAVEILKQASQNFTFTPEWGADLRTEHEKYLVKHCGNIPVFVI
NYPLTLKPFYMRDNEDGPQHTVAAVDLLVPGVGELFGGGLREERYHFLEERLARSGLTEVYQWYLDLRRF
GSVPHGGFGMGFERYLQCILGVDNIKDVIPFFPRFPHSCLL

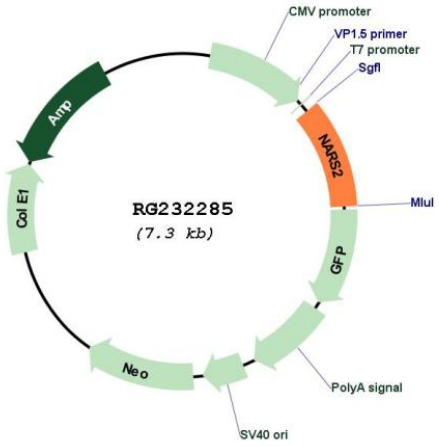
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001243251

ORF Size: 750 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_001243251.1, NP_001230180.1
RefSeq Size:	2038 bp
RefSeq ORF:	753 bp
Locus ID:	79731
UniProt ID:	Q96I59
Cytogenetics:	11q14.1
Protein Pathways:	Aminoacyl-tRNA biosynthesis
Gene Summary:	This gene encodes a putative member of the class II family of aminoacyl-tRNA synthetases. These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be imported to the mitochondrion where it is thought to catalyze the ligation of asparagine to tRNA molecules. Mutations in this gene have been associated with combined oxidative phosphorylation deficiency 24 (COXPD24). [provided by RefSeq, Mar 2015]