

Product datasheet for **RG203201**

NARS2 (NM_024678) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NARS2 (NM_024678) 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)



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ORF Nucleotide Sequence:

>RG203201 representing NM_024678
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGGGTCCGCTGCCTGCTGCGGTCGGTCCGCTTCTGTTCCCTCGCCCCCTCCCCAAGCACAAC
 CTTAGCCAAACTGAGCGTGCAGGACGCTCTCGGGCTCAGAACGCGAGTGGGGAGCGCATTAAAGTCCA
 GGGATGGATTCTGTCGATCCAGAAAGGAAGTCTGTTCCCTGCATGTAAATGATGGGTCATCTTTG
 GAAAGCCTCAGGTTGTTGCAGATTCAGGCCTTGACAGTAGAGAATTAACCTTTGGGAGTCTGTGGAAG
 TACAAGGCGAGCTGATAAAAGTCCATCCAAAAGGCAAAATGTGGAAGTGAAGGCAGAAAAAATTAAGT
 TATTGAAATTGTGATGCCAAGGATTTCCCATCAAATAAAAGAGAGGCATCCTCTGGAGTACCTGCGA
 CAATATCCTCACTTAGGTGTAGGACTAACGTTCTGGTCTATATTGAGGATTCGAGTGAAGCGACAG
 CTGCTATTCATTCTTTAAGGACAGTGGCTTTGTACATATCATACTCCAATAATCACATCCAATGA
 CTCTGAGGGAGCTGGAGAAGCTTTTCAACTTGAACCTTCAGGCAAACTTAAGGTACCTGAGGAGAATTC
 TTCAATGTTCTGCTTTCTAACTGTCTCAGGACAACCTCATCTAGAAGTGTGAGGAGCTTTTACTC
 AAGTGTACCTTTGGTCCGACCTTCCGAGCTGAAAATCTCAGAGCCGGAGGCACCTGGCAGAGTTTTA
 TATGATAGAAGCAGAGATTTCTTTGTTGACAGCCTTCAAGATCTTATGCAGGTTATAGAGGAAGTTC
 AAGGCTACAACAATGATGGTCTCTCAAATGTCTGAAGATGTTGAACTCTGTCAAAAATTCATAGCAC
 CTGGCCAAAAGGACAGATTAGAACATATGCTAAAAACAACCTTTTAAATCATTCTTATACTGAAGCAGT
 GGAGATCTTAAGCAAGCATCCAGAACCTCACCTTTACCCAGAGTGGGGTGTGACCTACGGACTGAA
 CATGAAAAGTACCTGGTGAAGCACTGTGCAACATACCTGTCTTCGTTATTAATTATCCATTAACACTCA
 AGCCTTTACATGAGGGATAATGAAGATGGCCCTCAGCACACGGTTGCTGCTGTTGATCTCTGGTTCC
 TGGAGTTGGGAACTCTTTGGAGGAGCCCTCAGAGAAGAACGATACCATTTCTTAGAGGAGCGCTTAGCC
 AGATCGGGACTTACAGAAGTCTACCAATGGTATCTGGACCTTCGTCGATTTGGATCTGTGCCACATGGAG
 GTTTTGGGATGGGATTTGAACGCTACCTGCAGTGCATCTTGGGTGTTGACAATATCAAAGATGTTATCCC
 TTTCCAAGGTTTCTCATTATGCCTTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG203201 representing NM_024678
 Red=Cloning site Green=Tags(s)

MLGVRCLLRVRFCSAPFPKHKPSAKLSVRDALGAQNASGERIKIQGWIRSVRSQKEVFLHVNDGSSL
 ESLQVVADSGLSRELTFGSSVEVQQLIKSPSKRQVELKAEIKVIGNCDAKDFPIKYKERHPLYLR
 QYPHFRCTNVLGSLIRSEATAAIHSFFKDSGFVHIHTPIITSNDSEGAGELFQLEPSGKLVPEENF
 FNVPAFLTVSGQLHLEVMGSAFTQVFTFGPTFRAENSQSRRLAEFYMIEAEISFVDSLQDLMQVIEELF
 KATTMMVL SKPEDVELCHKFIAPGQKDRLEHMLKNNFLII SYTEAVEILKQASQNF TTP EWGADLRTE
 HEKYL VKHCGNIPVFVINYPLTLKPFYMRDNEDGPQHTVAAVDLLVPGVGELFGGGLREERYHFLEERLA
 RSLTEVYQWYLDLRRFGVSPHGGFGMGERYLQCILGVDNIKDVIPFRPHSCLL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_024678

ORF Size: 1431 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_024678.3](#), [NP_078954.3](#)

RefSeq Size: 2110 bp

RefSeq ORF: 1434 bp

Locus ID: 79731

UniProt ID: [Q96I59](#)

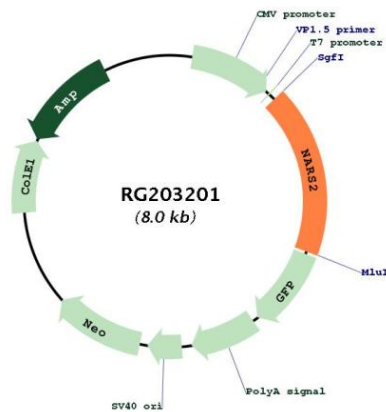
Cytogenetics: 11q14.1

Domains: tRNA-synt_2, tRNA_anti

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]

Product images:



Circular map for RG203201