

Product datasheet for **RG204825**

NMNAT1 (NM_022787) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NMNAT1 (NM_022787) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NMNAT1
Synonyms:	LCA9; NMNAT; PNAT1; SHILCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204825 representing NM_022787 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGAAAATCCGAGAAGACTGAAGTGTTCTCCTTGCTGTGGTTCATTCAATCCCATCACCAACATGC
ACCTCAGGTTGTTTGAGCTGGCCAAGGACTACATGAATGGAACAGGAAGGTACACAGTTGTCAAAGGCAT
CATCTCCTGTTGGTGATGCCTACAAGAAGAAAGGACTATTCTCCTGCCTATCACCGGTATCATGGCA
GAATTGCTACCAAGAATTCTAAATGGGTGGAAGTTGATACATGGGAAAGTCTTCAGAAGGAGTGGAAG
AGACTCTGAAGGTGCTAAGACACCATCAAGAGAAATTGGAGGCTAGTGACTGTGATCACCAGCAGAATC
ACCTACTCTAGAAAGGCCTGGAAGGAAGAGGAAGTGGACTGAAACACAAGATTCTAGTCAAAGAAATCC
CTAGAGCCAAAAACAAAAGCTGTGCCAAAAGGTCAAGCTGCTGTGTGGGCGAGATTATTGGAGTCCTTTG
CTGTTCCCAATTTGTGGAAGAGTGAAGACATCACCCAAATCGTGGCCAATATGGGCTCATATGTGTTAC
TCGGGCTGGAAATGATGCTCAGAAGTTTATCTATGAATCGGATGTGCTGTGGAACACCGGAGCAACATT
CACGTGGTGAATGAATGGATCGCTAATGACATCTCATCCAAAAATCCGGAGAGCCCTCAGAAGGGGCC
AGAGCATTGCTACTTGGTACCAGATCTGTCCAAGAATACATTGAAAAGCATAATTTGTACAGCTCTGA
GAGTGAAGACAGGAATGCTGGGGTCATCTGGCCCTTTGCAGAGAAACACTGCAGAAGCTAAGACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204825 representing NM_022787
 Red=Cloning site Green=Tags(s)

MENSEKTEVLLACGSFNPITNMHLRFLFELAKDYMNGTGRYTVVKGIIISPVGDAYKKKGLIPAYHRVIMA
 ELATKNSKWVEVDTWESLQKEWKETLKVLRHHQEKLEASDCDHQQNSPTLERPGRKRKWTETQDSSQKKS
 LEPKTKAVPKVKLLCGADLLESFAVPNLWKSEDITQIVANYGLICVTRAGNDAQKF IYESDVLWKHRSNI
 HVVNEWIANDISSTKIRRALRRGQSIRYLVPLVQEYIEKHNLVYSESEDRNAGVILAPLQRNTAEAKT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022787

ORF Size: 837 bp

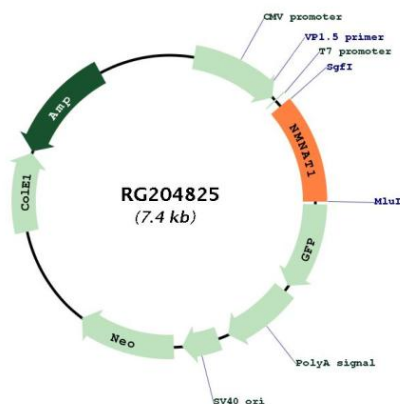
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none">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_022787.4
RefSeq Size:	1825 bp
RefSeq ORF:	840 bp
Locus ID:	64802
UniProt ID:	Q9HAN9
Cytogenetics:	1p36.22
Domains:	CTP_transf_2
Protein Pathways:	Metabolic pathways, Nicotinate and nicotinamide metabolism
Gene Summary:	This gene encodes an enzyme which catalyzes a key step in the biosynthesis of nicotinamide adenine dinucleotide (NAD). The encoded enzyme is one of several nicotinamide nucleotide adenylyltransferases, and is specifically localized to the cell nucleus. Activity of this protein leads to the activation of a nuclear deacetylase that functions in the protection of damaged neurons. Mutations in this gene have been associated with Leber congenital amaurosis 9. Alternative splicing results in multiple transcript variants. Pseudogenes of this gene are located on chromosomes 1, 3, 4, 14, and 15. [provided by RefSeq, Jul 2014]

Product images:



Circular map for RG204825