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Product datasheet for SC122936

NMNAT1 (NM_022787) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NMNAT1 (NM_022787) Human Untagged Clone
Tag:	Tag Free
Symbol:	NMNAT1
Synonyms:	LCA9; NMNAT; PNAT1; SHILCA
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_022787 edited
AGAGTGCGACCGAGATGTTCCACTCGCTGGCGTCCGGGCCGCTGGTGATCTCCGGTAGCA
CTCGGGCCGGCGGACAGTGAGGGCGCGACAACAAGGGAGGTGTCACAGTTTTCCATTTAG
ATCAACAACTTCAAGTTCTTACCATGGAAAATTCCGAGAAGACTGAAGTGGTTCTCCTTG
CTTGTGGTTCATTCAATCCCATCACCAACATGCACCTCAGGTTGTTTGAGCTGGCCAAGG
ACTACATGAATGGAACAGGAAGGTACACAGTTGTCAAAGGCATCATCTCTCCTGTTGGTG
ATGCCTACAAGAAGAAAGGACTCATTCCTGCCTATCACCGGGTCATCATGGCAGAACTTG
CTACCAAGAATTCTAAATGGGTGGAAGTTGATACATGGGAAAGTCTTCAGAAGGAGTGGA
AAGAGACTCTGAAGGTGCTAAGACACCATCAAGAGAAATTGGAGGCTAGTGACTGTGATC
ACCAGCAGAACTCACCTACTCTAGAAAGGCCTGGAAGGAAGAGGAAGTGGACTGAAACAC
AAGATTCTAGTCAAAAGAAATCCCTAGAGCCAAAAACAAAAGCTGTGCCAAAGGTCAAGC
TGCTGTGTGGGGCAGATTTATTGGAGTCCTTTGCTGTTCCCAATTTGTGGAAGAGTGAAG
ACATCACCCAAATCGTGGCCAACTATGGGCTCATATGTGTTACTCGGGCTGGAAATGATG
CTCAGAAGTTTATCTATGAATCGGATGTGCTGTGGAAACACCGGAGCAACATTCACGTGG
TGAATGAATGGATCGCTAATGACATCTCATCCACAAAAATCCGGAGAGCCCTCAGAAGGG
GCCAGAGCATTCGCTACTTGGTACCAGATCTTGTCCAAGAATACATTGAAAAGCATAATT
TGTACAGCTCTGAGAGTGAAGACAGGAATGCTGGGGTCATCCTGGCCCCTTTGCAGAGAA
ACACTGCAGAAGCTAAGACATAGGAATTCTACAGCATGATATTTCAGACTTCCCATTTGG
GGATCTGAAACAATCTGGGAGTTAATAACTGGGGAAAGAAGTTGTGATCTGTTGCCTAAA
CTAAAGCTTAAAAGTTTAGTAAAAATCGTCTGGGCACAGTGGCTCACGCCTGTAGTCCCA
GCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGACCCCAGGTGGTGGAGGTTGCAGTGA
GCCAAGATTGCACCATTGCACTCCAGCCTGGCGACAGAGCAAGACTCTGTCTCAAAAAAA
AAAAAAAAATTTAGTAAAAATCAATGGTAAGCTAAAATAAGTTTTTGTTTGTTTATTTGT
TTTTGAGATGGAGTCTCTACTAAAAATACAAAAAATTAGCCAGGCATGGTGCCGCATAAC
TATAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGCACAG
GTTCCAGTGGGCCAAGGTTGTGCCACTGCACTCCAGCCTGGGCAAAAAAGCAAAACTCCA
TCTCAAAGAGAAAAAAAAAAAAAGACCGGGTGTGGTGGCTCACACCTGTAATCCCAGCACT
TTGGGAGGCCTAAGTGGGTGGATCACGTGAGGTCAAGAGTTCAAGACCAGCCTGGCCAAT
ATGGTGAAACCCCATCTCTACTAAGAATACAAAAAATTAGCTGAGCATGGTGGTGGGCTC
CTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCAGA
GGTTGCAGTAAGCCAAGATCGTGCCATTGCACTCCAGCCTGGGTGACAGAGCGAGACTCC
ATCTCAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_022787 unedited
NAGAACAGTACAGATATTTGTAAACGACTCACTATAGGCGGCCGCGNAATTCGCACGAGN
AGAGTGCGACCGAGNAGTTCCACTCGCTGGCGTCCGGGCCGCTGGTGATCTCCGGTAGCA
CTCGGGCCGGCGGACAGTGAGGGCGCGACAACAAGGGAGGTGTCACAGTTTTCCATTTAG
ATCAACAACTTCAAGTTCTTACCATGGAAAATTCCGAGAAGACTGAAGTGGTTCTCCTTG
CTTGTGGTTCATTCAATCCCATCACCAACATGCACCTCAGGTTGTTTGAGCTGGCCAAGG
ACTACATGAATGGAACAGGAAGGTACACAGTTGTCAAAGGCATCATCTCTCCTGTTGGTG
ATGCCTACAAGAAGAAAGGACTCATTCCTGCCTATCACCGGGTCATCATGGCAGAACTTG
CTACCAAGAATTCTAAATGGGTGGAAGTTGATACATGGGAAAGTCTTCAGAAGGAGTGGA
AAGAGACTCTGAAGGTGCTAAGACACCATCAAGAGAAATTGGAGGCTAGTGACTGTGATC
ACCAGCAGAACTCACCTACTCTAGAAAGGCCTGGAAGGAAGAGGAAGTGGACTGAAACAC
AAGATTCTAGTCAAAAGAAATCCCTAGAGCCAAAAACAAAAGCTGTGCCAAAGGTCAAGC
TGCTGTGTGGGGCAGATTTATTGGAGTCCTTTGCTGTTCCCAATTTGTGGAAGAGTGAAG
ACATCACCCAAATCGTGGCCAACTATGGGCTCATATGTGTTACTCGGGCTGGAAATGATG
CTCAGAAGTTTATCTATGAATCGGATGTGCTGTGGAAACACCGGAGCAACTTCACGTGGT
GAATGAATGGATCGCTAATGACATCTCATCCACAAAAATCCGAAAGCCCTCA

Restriction Sites: Please inquire

ACCN: NM_022787

Insert Size:	1825 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
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_022787.2, NP_073624.2
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]
Transcript Variant: This variant (1) encodes the longer isoform (1). Variants 1 and 2 encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.