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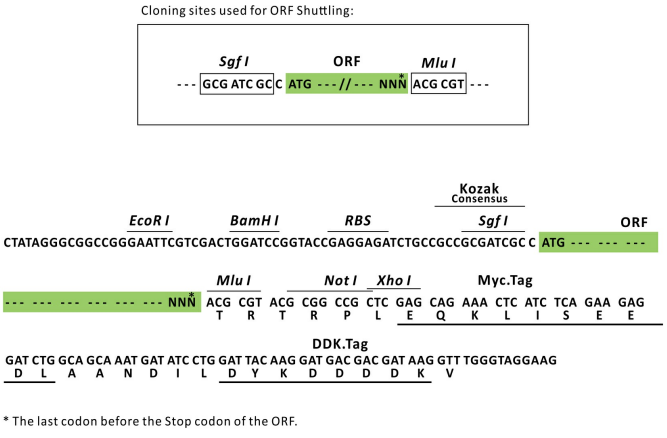
Product datasheet for MR222867L3

Nmnat1 (NM_133435) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nmnat1 (NM_133435) Mouse Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	Nmnat1
Synonyms:	2610529L11Rik; 5730441G13Rik; D4Cole1e; nmnat
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR222867).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	



ACCN:	NM_133435
ORF Size:	858 bp

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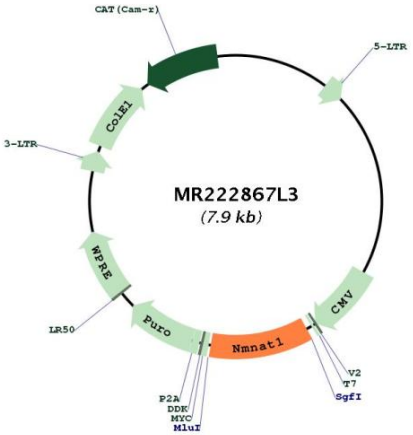
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	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_133435.1
RefSeq Size:	954 bp
RefSeq ORF:	858 bp
Locus ID:	66454
UniProt ID:	Q9EPA7
Cytogenetics:	4 E2

Gene Summary: Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP (PubMed:15381699). Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate with the same efficiency (By similarity). Can use triazofurin monophosphate (TrMP) as substrate (By similarity). Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+) (By similarity). For the pyrophosphorolytic activity, prefers NAD(+) and NaAD as substrates and degrades NADH, nicotinic acid adenine dinucleotide phosphate (NHD) and nicotinamide guanine dinucleotide (NGD) less effectively (By similarity). Involved in the synthesis of ATP in the nucleus, together with PARP1, PARG and NUDT5 (By similarity). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (By similarity). Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+) (By similarity). Protects against axonal degeneration following mechanical or toxic insults (PubMed:15310905, PubMed:16914673). Delays axonal degeneration after axotomy. Results in a >10-fold increase in intact neurites 72 hours after injury (PubMed:16914673).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222867L3