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Product datasheet for MG203070

Nmnat3 (NM_144533) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nmnat3 (NM_144533) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nmnat3
Synonyms:	4933408N02Rik; PNAT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG203070 representing NM_144533
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGAACCGAATCCCTGTGGTGCTTCTGGCCTGTGGTTCCTTCAACCCCATCACGAATATGCACCTGC
GCTTGTTTGAGGTGGCCAGAGACCACCTACACCAAACAGGAAGGTACCAGGTGATTGAGGGCATCATCTC
ACCCGTCAATGACAGCTATGGGAAGAAAGACCTGGTGGCTTCCCATCACCGAGTGGCCATGGCCCGGCTG
GCCCTGCAGACATCTGACTGGATTCGGGTGGACCCCTGGGAGAGTGAGCAGGCGCAGTGGATGGAAACGG
TGAAGGTGCTGAGGCACCATCACAGGGAGCTGCTCAGATCCTCAGCCCAGATGGATGGCCCAGACCCCAG
CAAGACACCATCAGCCTCTGCAGCACTGCCAGAGTTGAAACTCCTCTGCGGAGCTGATGTCCTCAAGACC
TTCCAGACCCCCAACCTCTGGAAAGACACGCACATCCAGGAAATAGTGGAGAAGTTCGGCTTGGTGTGCG
TGAGCAGGAGCGGTCATGACCCGGAAAGGTACATCTCGGACTCGCCCATCCTCCAGCAGTTTCAGCACAA
CATTCACCTGGCCAGGGAACCCGTTCTGAACGAGATCAGTGCCACATACGTCAGGAAAGCCTTGGGACAA
GGGCAGAGCGTGAAGTACCTCCTCCCTGAGGCCGTCATCACCTACATCAGGGACCAGGGCCTCTACATCA
ATGACGGTTCCTGGAAAGGGAAAGGAAAGACTGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

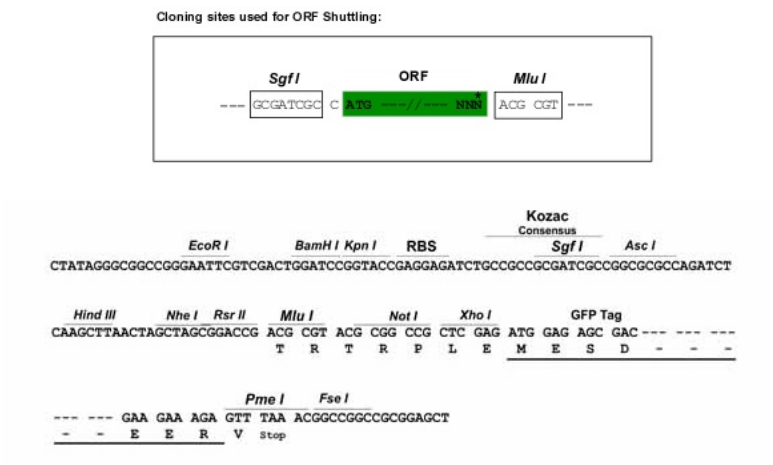
>MG203070 representing NM_144533
Red=Cloning site Green=Tags(s)

MKNRIPVVLLACGSFNPITNMHLRLFEVARDHLHQTGRYQVIEGIISPVNDSYGKKDLVASHHRVAMARL
ALQTSDWIRVDPWESEQAQWMETVKVLRHHHHRELLRSSAQMDGPDPSKTPSASAALPELKLLCGADVLKT
FQTPNLWKDTHIQEIVEKFGLVCVSRSGHDPERYISDSPILQQFQHNIHLAREPVLNEISATYVRKALGQ
GQSVKYLLPEAVITYIRDQGLYINDGSWKGKGKTG

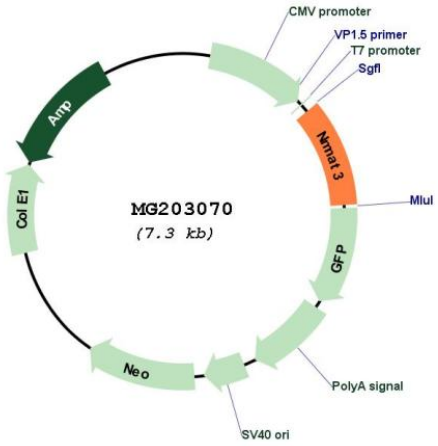
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_144533

ORF Size: 735 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_144533.3
RefSeq Size:	2160 bp
RefSeq ORF:	738 bp
Locus ID:	74080
UniProt ID:	Q99JR6
Cytogenetics:	9 E3.3
Gene Summary:	Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP. Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate with the same efficiency. Can use triazofurin monophosphate (TrMP) as substrate. Can also use GTP and ITP as nucleotide donors. Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+). For the pyrophosphorolytic activity, can use NAD(+), NADH, NaAD, nicotinic acid adenine dinucleotide phosphate (NHD), nicotinamide guanine dinucleotide (NGD) as substrates. Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+). Protects against axonal degeneration following injury.[UniProtKB/Swiss-Prot Function]