

Product datasheet for **TR506739**

Nmnat2 Mouse shRNA Plasmid (Locus ID 226518)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Nmnat2 Mouse shRNA Plasmid (Locus ID 226518)
Locus ID:	226518
Synonyms:	AI843915; D030041I09Rik; PNAT1; PNAT2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Nmnat2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 226518). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC089007 , NM_175460 , NM_175460.1 , NM_175460.2 , NM_175460.3 , BC062645 , BC078443
UniProt ID:	Q8BNJ3
Summary:	Nicotinamide/nicotinate-nucleotide adenyltransferase that acts as an axon maintenance factor (PubMed:20126265, PubMed:23082226). Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP (By similarity). Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate but with a lower efficiency (By similarity). Cannot 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(+), NADH and NaAD as substrates and degrades nicotinic acid adenine dinucleotide phosphate (NAD) less effectively (By similarity). Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+) (By similarity). Axon survival factor required for the maintenance of healthy axons: acts by delaying Wallerian axon degeneration, an evolutionarily conserved process that drives the loss of damaged axons (PubMed:20126265, PubMed:23082226).[UniProtKB/Swiss-Prot Function]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).