

Product datasheet for SR408213

OriGene Technologies, Inc.

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Nmnat1 Mouse siRNA Oligo Duplex (Locus ID 66454)

Product data:

Product Type: siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

Stability: One year from date of shipment when stored at -20°C.

of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

Note: Single siRNA duplex (10nmol) can be ordered.

RefSeq: <u>NM 133435, NM 001356357</u>

UniProt ID: Q9EPA7

Synonyms: 2610529L11Rik; 5730441G13Rik; D4Cole1e; nmnat

Components: Nmnat1 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 66454)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml

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]





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Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, 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 siRNA control (quantitative RT-PCR data required).