

Product datasheet for **TP522867**

Nmnat1 (NM_133435) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse nicotinamide nucleotide adenylyltransferase 1 (Nmnat1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >MR222867 protein sequence
Red=Cloning site **Green**=Tags(s)

MDSSKKTEVLLACGSFNPITNMHLRFLAKDYMHATGKYSVIKGIISPVGDAYKKKGLIPAHHRIIMA
ELATKNSHWVEVDTWESLQKEWVETVKVLRVHQEKLATGSCSYPQSSPALEKPGKRKRKADQKQDSSPQK
PQEPKPTGVPKVKLLCGADLLESFVSNLWKMEDITQIVANFGLICITRAGSDAQKFIYESDVLWRHQS
IHLVNEWITNDISSTKIRRALRRGQSIRYLVPDLVQEYIEKHELYNTESEGRNAGVTLAPLQRNAAEAKH
NHSTL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 32.4 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_597679](#)

Locus ID: 66454

UniProt ID: [Q9EPA7](#), [Q3V449](#)



[View online »](#)

RefSeq Size: 954

Cytogenetics: 4 E2

RefSeq ORF: 858

Synonyms: 2610529L11Rik; 5730441G13Rik; D4Cole1e; nmnat

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 (NAD) 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]