

Rabbit Anti-Nmnat1 antibody

SL11738R

Product Name	Nmnat1
Chinese Name:	烟酰胺核苷酸腺苷转移酶1抗体
Alias:	NaMN adenylyltransferase 1; Nicotinamide mononucleotide adenylyltransferase 1; nicotinamide nucleotide adenylyltransferase 1; nicotinate nucleotide adenylyltransferase 1; Nicotinate-nucleotide adenylyltransferase 1; NMN adenylyltransferase 1; NMNA1_HUMAN; Nmnat 1; Nmnat1; Nmnat-1; OTTHUMP00000001731; OTTHUMP00000001732; OTTHUMP00000035892; PNAT 1; PNAT1; pyridine nucleotide adenylyltransferase 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Nmnat1:201-279/279
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Nicotinamide adenine dinucleotide (NMNAT) is an essential cofactor involved in fundamental processes in cell metabolism. NMNAT plays a key role in NAD(+) biosynthesis, catalysing the condensation of nicotinamide mononucleotide and ATP,

and yielding NAD(+) and pyrophosphate. NMNAT appears to be a substrate of nuclear kinases and contains at least three potential phosphorylation sites. The interaction of NMNAT with nuclear proteins is likely to be modulated by phosphorylation. NMNAT is widely expressed with highest levels in skeletal muscle, heart, liver and kidney.

Function:

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. Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+). 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. Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NAADP(+). Protects against axonal degeneration following mechanical or toxic insults.

Subunit: Homohexamer. Interacts with ADPRT/PARP1.

Subcellular Location: Nucleus.

Tissue Specificity:

Widely expressed with highest levels in skeletal muscle, heart and kidney. Also expressed in the liver pancreas and placenta. Widely expressed throughout the brain.

Similarity:

Belongs to the eukaryotic NMN adenylyltransferase family.

SWISS: Q9HAN9

Gene ID: 64802

Database links:

Entrez Gene: 64802Human

Entrez Gene: 66454Mouse

Omim: 608700Human

SwissProt: Q9HAN9Human

SwissProt: Q9EPA7Mouse

Unigene: 633762Human



