

**NMNAT2 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17277a****Specification**

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**NMNAT2 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O9BZQ4](#)**NMNAT2 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 23057

**Other Names**

Nicotinamide mononucleotide adenylyltransferase 2, NMN adenylyltransferase 2, Nicotinate-nucleotide adenylyltransferase 2, NaMN adenylyltransferase 2, NMNAT2, C1orf15, KIAA0479

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**NMNAT2 Antibody (N-term) Blocking Peptide - Protein Information**Name NMNAT2 ([HGNC:16789](#))**Function**

Nicotinamide/nicotinate-nucleotide adenylyltransferase that acts as an axon maintenance factor (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 (By similarity). Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP (PubMed: [16118205](http://www.uniprot.org/citations/16118205), PubMed: [17402747](http://www.uniprot.org/citations/17402747)). Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate but with a lower efficiency (PubMed: [16118205](http://www.uniprot.org/citations/16118205), PubMed: [17402747](http://www.uniprot.org/citations/17402747)). Cannot use triazofurin monophosphate (TrMP) as substrate (PubMed: [16118205](http://www.uniprot.org/citations/16118205), PubMed: [17402747](http://www.uniprot.org/citations/17402747)). Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+) (PubMed: [16118205](http://www.uniprot.org/citations/16118205), PubMed: [17402747](http://www.uniprot.org/citations/17402747)). For the

pyrophosphorolytic activity prefers NAD(+), NADH and NaAD as substrates and degrades nicotinic acid adenine dinucleotide phosphate (NAD) less effectively (PubMed:<a href="http://www.uniprot.org/citations/16118205" target="\_blank">16118205</a>, PubMed:<a href="http://www.uniprot.org/citations/17402747" target="\_blank">17402747</a>). Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+) (PubMed:<a href="http://www.uniprot.org/citations/16118205" target="\_blank">16118205</a>, PubMed:<a href="http://www.uniprot.org/citations/17402747" target="\_blank">17402747</a>). Also acts as an activator of ADP- ribosylation by supporting the catalytic activity of PARP16 and promoting mono-ADP-ribosylation of ribosomes by PARP16 (PubMed:<a href="http://www.uniprot.org/citations/34314702" target="\_blank">34314702</a>).

#### Cellular Location

Golgi apparatus membrane; Lipid-anchor {ECO:0000250|UniProtKB:Q8BNJ3}. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q8BNJ3}; Lipid-anchor {ECO:0000250|UniProtKB:Q8BNJ3}. Cytoplasm. Cell projection, axon {ECO:0000250|UniProtKB:Q8BNJ3}. Note=Delivered to axons with Golgi- derived cytoplasmic vesicles. {ECO:0000250|UniProtKB:Q8BNJ3}

#### Tissue Location

Highly expressed in brain, in particular in cerebrum, cerebellum, occipital lobe, frontal lobe, temporal lobe and putamen. Also found in the heart, skeletal muscle, pancreas and islets of Langerhans.

### NMNAT2 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

### NMNAT2 Antibody (N-term) Blocking Peptide - Images

### NMNAT2 Antibody (N-term) Blocking Peptide - Background

This gene product belongs to the nicotinamidemononucleotide adenylyltransferase (NMNAT) enzyme family, members of which catalyze an essential step in NAD (NADP) biosynthetic pathway. Unlike the other human family member, which is localized to the nucleus, and is ubiquitously expressed; this enzyme is cytoplasmic, and is predominantly expressed in the brain. Two transcript variants encoding different isoforms have been found for this gene.

### NMNAT2 Antibody (N-term) Blocking Peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Lau, C., et al. J. Biol. Chem. 285(24):18868-18876(2010)Sorci, L., et al. Biochemistry 46(16):4912-4922(2007)Lamesch, P., et al. Genomics 89(3):307-315(2007)Berger, F., et al. J. Biol. Chem. 280(43):36334-36341(2005)