

NMNAT2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57466**Specification****NMNAT2 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9BZQ4
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NMNAT2
Epitope Specificity	1-100/307
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Golgi apparatus.
SIMILARITY	Belongs to the eukaryotic NMN adenylyltransferase family.
SUBUNIT	Monomer.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

This gene product belongs to the nicotinamide mononucleotide 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. [provided by RefSeq, Jul 2008]

NMNAT2 Polyclonal Antibody - Additional Information**Gene ID** 23057**Other Names**

Nicotinamide/nicotinic acid mononucleotide adenylyltransferase 2, NMN/NaMN adenylyltransferase 2, 2.7.7.1, 2.7.7.18, Nicotinamide mononucleotide adenylyltransferase 2, NMN adenylyltransferase 2, Nicotinate-nucleotide adenylyltransferase 2, NaMN adenylyltransferase 2, NMNAT2 (HGNC:16789)

Target/Specificity

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.

Dilution

IHC-P~N/A
IHC-F~N/A
IF~1:50~200
ICC~N/A
E~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glycerol

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

NMNAT2 Polyclonal Antibody - 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) target="_blank">16118205, PubMed: [17402747](http://www.uniprot.org/citations/17402747) target="_blank">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) target="_blank">16118205, PubMed: [17402747](http://www.uniprot.org/citations/17402747) target="_blank">17402747). Cannot use triazofurin monophosphate (TrMP) as substrate (PubMed: [16118205](http://www.uniprot.org/citations/16118205) target="_blank">16118205, PubMed: [17402747](http://www.uniprot.org/citations/17402747) target="_blank">17402747). Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+) (PubMed: [16118205](http://www.uniprot.org/citations/16118205) target="_blank">16118205, PubMed: [17402747](http://www.uniprot.org/citations/17402747) target="_blank">17402747). For the pyrophosphorolytic activity prefers NAD(+), NADH and NaAD as substrates and degrades nicotinic acid adenine dinucleotide phosphate (NADP) less effectively (PubMed: [16118205](http://www.uniprot.org/citations/16118205) target="_blank">16118205, PubMed: [17402747](http://www.uniprot.org/citations/17402747) target="_blank">17402747). Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+) (PubMed: [16118205](http://www.uniprot.org/citations/16118205) target="_blank">16118205, PubMed: [17402747](http://www.uniprot.org/citations/17402747) target="_blank">17402747). 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: [34314702](http://www.uniprot.org/citations/34314702) target="_blank">34314702). May be involved in the maintenance of axonal integrity (By similarity).

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}

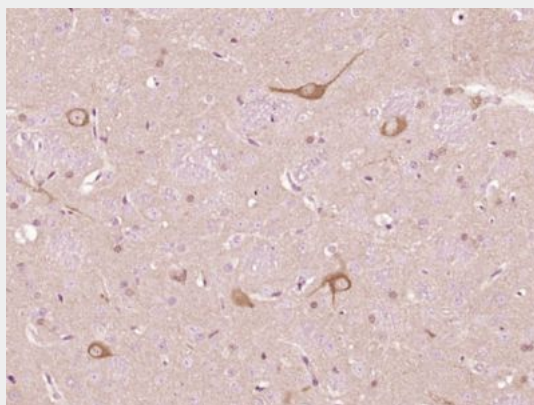
Tissue Location

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 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NMNAT2 Polyclonal Antibody - Images

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NMNAT2) Polyclonal Antibody, Unconjugated (bs-19296R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.