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NMNAT2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57466

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BZQ4
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34439

Additional Information

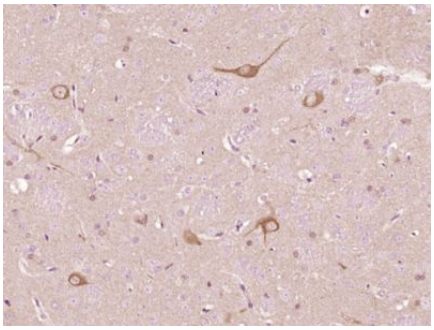
Gene ID	23057
Other Names	Nicotinamide/nicotinic acid mononucleotide adenylyltransferase 2, NMN/NaMN adenylyltransferase 2, 2.7.7.1, 2.7.7.18, Nicotinamide mononucleotide adenylyltransferase 2, NMN adenylyltransferase 2, Nicotinate-nucleotide adenylyltransferase 2, NaMN adenylyltransferase 2, NMNAT2 (HGNC:16789)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

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, PubMed:17402747). Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate but with a lower efficiency (PubMed:16118205, PubMed:17402747). Cannot use triazofurin monophosphate (TrMP) as substrate (PubMed:16118205, PubMed:17402747). Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+) (PubMed:16118205, PubMed:17402747). For the pyrophosphorolytic activity prefers NAD(+), NADH

	and NaAD as substrates and degrades nicotinic acid adenine dinucleotide phosphate (NHD) less effectively (PubMed:16118205, PubMed:17402747). Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+) (PubMed:16118205, PubMed: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). 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.

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 (AP57466) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.