

Rabbit anti-Human NMNAT3 Polyclonal Antibody | anti-NMNAT3 antibody

NMNAT3 Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA285838	Rabbit	Human	Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

NMNAT3; Polyclonal Antibody; NMNAT3 Antibody (Center); Nicotinamide mononucleotide adenylyltransferase 3; NMN adenylyltransferase 3; Nicotinate-nucleotide adenylyltransferase 3; NaMN adenylyltransferase 3; Pyridine nucleotide adenylyltransferase 3; PNAT-3; anti-NMNAT3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This NMNAT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 150-178 amino acids from the Central region of human NMNAT3.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Positions	150-178
Sequence Length	163
Applicable Applications for anti-NMNAT3 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
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. Can also use GTP and ITP as nucleotide donors. Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+). For the pyrophosphorolytic activity, can use NAD(+), NADH, NaAD, nicotinic acid adenine dinucleotide phosphate (NHD), nicotinamide guanine dinucleotide (NGD) as substrates. Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+). Protects against axonal degeneration following injury.
Cellular Location	Mitochondrion
Tissue Location	Expressed in lung and spleen with lower levels in placenta and kidney.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohiostchemistry)
Formalin-fixed and paraffin-embedded H.liver tissue reacted with NMNAT3 Antibody (Center



WB (Western Blot)
NMNAT3 Antibody (Center) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the NMNAT3 antibody detected the NMNAT3 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-NMNAT3 antibody	The coenzyme NAD and its derivatives are involved in hundreds of metabolic redox reactions and are utilized in protein ADP-ribosylation, histone deacetylation, and in some Ca(2+) signaling pathways. NMNAT (EC 2.7.7.1) is a central enzyme in NAD biosynthesis, catalyzing the condensation of nicotinamide mononucleotide (NMN) or nicotinic acid mononucleotide (NaMN) with the AMP moiety of ATP to form NAD or NaAD (Zhang et al., 2003 [PubMed 12574164]).
Product Categories/Family for anti-NMNAT3 antibody	Metabolism; Signal Transduction
References	Di Stefano, M., et al. Blood Cells Mol. Dis. 45(1):33-39(2010) Lau, C., et al. J. Biol. Chem. 285(24):18868-18876(2010) Sorci, L., et al. Biochemistry 46(16):4912-4922(2007) Berger, F., et al. J. Biol. Chem. 280(43):36334-36341(2005) Magni, G., et al. Cell. Mol. Life Sci. 61(1):19-34(2004)

NCBI AND UNIPROT INFORMATION

NCBI GI #	318068039
NCBI GeneID	349565
NCBI Accession #	NP_001186976.1; NP_835471.1
NCBI GenBank Nucleotide #	NM_001200047.1
UniProt Accession #	Q96T66; Q8N4G1; B3KVR6; D3DNF2; D3DNF3
Molecular Weight	28322
NCBI Official Full Name	nicotinamide/nicotinic acid mononucleotide adenylyltransferase 3 isoform 2
NCBI Official Synonym Full Names	nicotinamide nucleotide adenylyltransferase 3
NCBI Official Symbol	NMNAT3
NCBI Official Synonym Symbols	PNAT3; FKSG76; PNAT-3
NCBI Protein Information	nicotinamide/nicotinic acid mononucleotide adenylyltransferase 3
UniProt Protein Name	Nicotinamide/nicotinic acid mononucleotide adenylyltransferase 3
UniProt Gene Name	NMNAT3
UniProt Synonym Gene Names	NMN/NaMN adenylyltransferase 3; NMN adenylyltransferase 3; NaMN adenylyltransferase 3; PNAT-3
UniProt Entry Name	NMNA3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

