

NMNAT3, human recombinant protein
Nicotinamide Mononucleotide Adenylyl-transferase 3; NMN Adenylyltransferase 3;
NaMN Adenylyltransfer
Catalog # PBV11171r

Specification

NMNAT3, human recombinant protein - Product info

Primary Accession	Q96T66
Concentration	1
Calculated MW	~27.0 kDa (monomer). Human full-length NMNAT3 (aa 1-252) is fused at the N-terminus to a His-tag. KDa

NMNAT3, human recombinant protein - Additional Info

Gene ID	349565
Gene Symbol	NMNAT3
Other Names	
Nicotinamide Mononucleotide Adenylyl-transferase 3; NMN Adenylyltransferase 3; NaMN Adenylyltransferase 3; EC 2.7.7.18; EC 2.7.7.1	
Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	Yes
Results	≥ 2U/mg protein. One unit is defined as the amount of enzyme that synthesizes 1 μmol of NAD ⁺ per min.

Target/Specificity
NMNAT3

Format
Liquid

Storage
-20°C; 1 mg/ml in 50 mM sodium phosphate, pH 8.0 containing 300 mM sodium chloride, 1 mM DTT and 10% glycerol.

NMNAT3, human recombinant protein - 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](#)

NMNAT3, human recombinant protein - Images

NMNAT3, human recombinant protein - Background

This is the Mitochondrial NMNAT isoform. It catalyzes the formation of NAD⁺ from nicotinamide mononucleotide (NMN) and ATP. It can also use the deamidated form of nicotinic acid mononucleotide (NAMN) as substrate with the same efficiency. It can use tiazofurin monophosphate as substrate. It 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, mitochondrial NMNAT isoform can use NAD (+), NADH, NAAD, nicotinic acid adenine dinucleotide phosphate (NHD), nicotinamide guanine dinucleotide (NGD) as substrates. It fails to cleave phosphorylated dinucleotides NADP⁺, NADPH and NAADP⁺. It protects against axonal degeneration following injury.

NMNAT3, human recombinant protein - References

Wang Y.-G., et al. Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
Ota T., et al. Nat. Genet. 36:40-45(2004).
Muzny D.M., et al. Nature 440:1194-1198(2006).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Berger F., et al. J. Biol. Chem. 280:36334-36341(2005).