

Active Recombinant Human NMNAT1, His-tagged

Cat. No. NMNAT1-26H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NMNAT1 fused with N-terminal His-tag, was expressed in an E.coli cell expression system.
Species	Human
Source	E.coli
Description	This gene encodes an enzyme which catalyzes a key step in the biosynthesis of the coenzyme NAD. The encoded protein is one of several nicotinamide nucleotide adenyltransferases. Studies in Drosophila and mammalian neurons have shown the encoded protein can confer protection to damaged neurons. This protection requires enzymatic activity which increases NAD levels and activates a nuclear deacetylase which is the protective molecule. Pseudogenes of this gene are located on chromosomes 1, 3, 4, 14 and 15.
Form	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% Tween-20, 256 mM imidazole and 20% glycerol
Bio-activity	4200 pmol/min/μg Assay Conditions: The 50 μL reaction mixture contained 50 mM Tris-HCl, pH 7.4, 5 mM MgCl ₂ , 0.1 mM NMN, 0.1 mM ATP, and various amounts of NMNAT.
Molecular Mass	32.8 kDa
AA Sequence	MHHHHHHENSEKTEVVLLACGSFNPITNMHLRLFELAKDYMNGTGRYTVVKGIISPV

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GD AYKKKGLIPAYHRVI MAELATKNSKWVEVDTWESLQKEWKETLKVLRHHQEKL
EASDC DHQQNSPTLERPGRKRKWTETQDSSQKKSLE PKTKAVPKVKLLCGADLLE
SFAVPNL WKSEDTQIVANYGLICVTRAGNDAQKFIYESDVLWKHRSNIHVNEW IA
NDISSTKIRRA LRRGQSIRYLVPLDVQEYIEKHNLYSSESEDRNAGVILAPLQRNTAE
AKT

Purity ≥95%

Applications Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Stability >6 months at –80°C

GENE INFORMATION

Gene Name NMNAT1 nicotinamide nucleotide adenyltransferase 1 [Homo sapiens (human)]

Official Symbol NMNAT1

Synonyms NMNAT1; LCA9; NMNAT; PNAT1; nicotinamide nucleotide adenyltransferase 1; NMN adenyltransferase 1; NaMN adenyltransferase 1; pyridine nucleotide adenyltransferase 1; nicotinate-nucleotide adenyltransferase 1; EC 2.7.7.1; EC 2.7.7.18

Gene ID 64802

mRNA Refseq NM_022787

Protein Refseq NP_073624

MIM 608700

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UniProt ID	Q9HAN9
Chromosome Location	1p36.22
Pathway	Metabolism; Metabolism of vitamins and cofactors; Metabolism of water-soluble vitamins and cofactors
Function	ATP binding; nicotinamide-nucleotide adenylyltransferase activity; nicotinamide-nucleotide adenylyltransferase activity

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