



NMNAT3 highly active Recombinant Protein

CATALOG NUMBER: 90-356

Specifications

SPECIES:	Human
SOURCE SPECIES:	E. coli
SEQUENCE:	Human full-length NMNAT3 (aa 1-252) is fused at the N-terminus to a His-tag.
FUSION TAG:	His Tag
APPLICATIONS:	This recombinant proteins is for research use only.
BIOLOGICAL ACTIVITY:	>2U/mg protein. One unit is defined as the amount of enzyme that synthesizes 1umol of NAD+ per min.

Properties

PURITY:	>95% (SDS-PAGE)
PHYSICAL STATE:	Liquid
BUFFER:	In 50mM TRIS-HCl, pH 8.0, containing 300mM sodium chloride, 1mM DTT and 10% glycerol.
CONCENTRATION:	1mg/ml
STORAGE CONDITIONS:	Working aliquots are stable for up to 3 months when stored at -20°C.

Additional Info

ALTERNATE NAMES:	Nicotinamide Mononucleotide Adenylyltransferase 3, NMN Adenylyltransferase 3, NaMN Adenylyltransferase 3, EC 2.7.7.18, EC 2.7.7.1
ACCESSION NO.:	Q96T66
PROTEIN GI NO.:	30039706

Background

Mitochondrial NMNAT isoform. Catalyzes the formation of NAD⁺ from nicotinamide mononucleotide (NMN) and ATP. Can also use the deamidated form of nicotinic acid mononucleotide (NAMN) as substrate with the same efficiency. Can use thiazofurin monophosphate 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, mitochondrial NMNAT isoform 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.

FOR RESEARCH USE ONLY

December 14, 2016