PRODUCT INFORMATION

Expression system E.coli

Domain 1-285aa

UniProt No. Q9EPA7

NCBI Accession No. NP_597679

Alternative Names

Nicotinamide nucleotide adenylyltransferase 1, NMN/NaMN adenylyltransferase 1, NMN adenylyltransferase 1, NaMN adenylyltransferase 1, Leber's congenital amaurosis 9, PNAT1

PRODUCT SPECIFICATION

Molecular Weight

34.7 kDa (308aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol, 1mM EDTA

Purity > 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Nmnat1, also known as nicotinamide/nicotinic acid mononucleotide adenylyltransferase1, is a central enzyme in NAD biosynthesis, catalyzing the condensation of nicotinamide mononucleotide (NMN) of nicotinic acid mononucleotide (NaMN) with the AMP moiety of ATP to form NAD or NaAD. It is widely expressed with high levels in skeletal muscle, heart, liver and kidney. This protein appears to have the ability to protect against axonal degeneration following mechanical or toxic insults. Recombinant mouse Nmnat1 protein, fused to His-tag at N-



terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMDSSKKT EVVLLACGSF NPITNMHLRL FELAKDYMHA TGKYSVIKGI ISPVGDAYKK KGLIPAHHRI IMAELATKNS HWVEVDTWES LQKEWVETVK VLRYHQEKLA TGSCSYPQSS PALEKPGRKR KWADQKQDSS PQKPQEPKPT GVPKVKLLCG ITNDISSTKI RRALRRGQSI RYLVPDLVQE YIEKHELYNT ESEGRNAGVT LAPLQRNAAE AKHNHSTL

General References

Emanuelli M., et al. (2001) J Biol Chem. 276(1):406-12 Zhou T., et al. (2002) J Biol Chem. 277(15) 13148-54.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)

