PRODUCT INFORMATION

Expression system E.coli

Domain 1-279aa

UniProt No. Q9HAN9

NCBI Accession No. NP_073624

Alternative Names

Nicotinamide nucleotide adenylyltransferase 1, Nicotinamide/nicotinic acid mononucleotide adenylyltransferase 1, NMN/NaMN adenylyltransferase 1, Nicotinamide nucleotide adenylyltransferase, Leber's congenital amaurosis 9, LCA9, PNAT1, NMNAT

PRODUCT SPECIFICATION

Molecular Weight

36.0 kDa (315aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol 0.1M NaCl, 1mM DTT, 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 NMNAT or PNAT1, 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. 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 human NMNAT1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

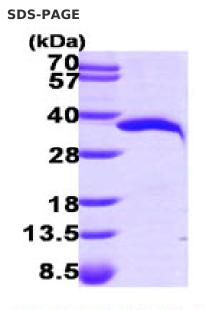
Amino acid Sequence

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMENS EKTEVVLLAC GSFNPITNMH LRLFELAKDY MNGTGRYTVV KGIISPVGDA YKKKGLIPAY HRVIMAELAT KNSKWVEVDT WESLQKEWKE TLKVLRHHQE KLEASDCDHQ QNSPTLERPG RKRKWTETQD SSQKKSLEPK TKAVPKVKLL CGADLLESFA VPNLWKSEDI TQIVANYGLI CVTRAGNDAQ KFIYESDVLW KHRSNIHVVN EWIANDISST KIRRALRRGQ SIRYLVPDLV QEYIEKHNLY SSESEDRNAG VILAPLQRNT AEAKT

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



15% SDS-PAGE (3ug)

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