abcam

Product datasheet

Recombinant human NMNAT3 protein ab157274

Description

Product name	Recombinant human NMNAT3 protein
Biological activity	Specific Activity: 2.35 U/mg.
Purity	> 95 % SDS-PAGE.
Expression system	Escherichia coli
Accession	Q96T66
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MKSRIPVVLLACGSFNPITNMHLRMFEVARDHLHQTGMYQ VIQGIISPVN DTYGKKDLAASHHRVAMARLALQTSDWIRVDPWESEQA QWMETVKVLRHH HSKLLRSPPQMEGPDHGKALFSTPAAVPELKLLCGADVL KTFQTPNLWKD AHIQEIVEKFGLVCVGRVGHDPKGYIAESPILRMHQHNIHLA KEPVQNEI SATYIRRALGQGQSVKYLIPDAVITYIKDHGLYTKGSTWKGK STQSTEGK TS
Predicted molecular weight	30 kDa including tags
Amino acids	1 to 252
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab157274** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Constituents: 0.02% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.79% Tris HCl, 10% Glycerol (glycerin, glycerine), 1.75% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP. Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate with the same efficiency. Can use triazofurin monophosphate (TrMP) 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, 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.
Tissue specificity	Expressed in lung and spleen with lower levels in placenta and kidney.
Pathway	Cofactor biosynthesis; NAD(+) biosynthesis; NAD(+) from nicotinamide D-ribonucleotide: step 1/1.
Sequence similarities	Belongs to the eukaryotic NMN adenylyltransferase family.
Cellular localization	Mitochondrion.