# 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

VIQGISPVN

DTYGKKDLAASHHRVAMARLALQTSDWIRVDPWESEQA

QWMETVKVLRHH

 ${\tt HSKLLRSPPQMEGPDHGKALFSTPAAVPELKLLCGADVL}$ 

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  $\underline{\textbf{Abpromise guarantee}}$  covers the use of  $\underline{\textbf{ab157274}}$  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

1

#### **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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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