

Product information

NRK1, 1-199aa

Human, His-tagged, Recombinant, *E.coli*

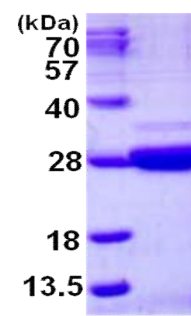
Cat. No. IBATGP1570

Full name: nicotinamide riboside kinase 1 isoform 1

NCBI Accession No.: NP_060351

Synonyms: bA235O14.2, NRK1, RP11-235O14.2

Description: NRK1 belongs to the uridine kinase family. NAD⁺ is essential for life in all organisms, both as a coenzyme for oxidoreductases and as a source of ADPribosyl groups used in various reactions, including those that retard aging in experimental systems. Nicotinic acid and nicotinamide were defined as the vitamin precursors of NAD⁺. This enzyme catalyzes the phosphorylation of nicotinamide riboside (NR) and nicotinic acid riboside (NaR) to form nicotinamide mononucleotide (NMN) and nicotinic acid mononucleotide (NaMN). The enzyme also phosphorylates the antitumor drugs tiazofurin and 3-deazaguanosine. Recombinant human NRK1 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

<p>Form: Liquid. In 20 mM Tris-HCl buffer, pH8.0, 10% glycerol, 2mM DTT, 200mM NaCl</p> <p>Molecular Weight: 25.6kDa (222aa), confirmed by MALDI-TOF</p> <p>Purity: > 90% by SDS - PAGE</p> <p>Concentration: 0.5mg/ml (determined by Bradford assay)</p>	
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Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGSMTKFIIG ISGVTNSGKT TLAKNLQKHL PNCVVISQDD FFKPESEIET DKNGLFYDV LEALNMEKMM
 SAISCWMESA RHSVSTDQE SAEIPIILII EGFLLFNYKP LDTIWNRSYF LTIPYEECKR RRSTRVYQPP DSPGYFDGHV WPMYLYRQE
 MQDITWEVVY LDGKSEEDL FLQVYEDLIQ ELAKQKCLQV TA

General references:

Bieganowski P, et al.(2004) *Cell*. 14;117(4):495-502.

Khan JA, et al. (2007) *Structure*. 15(8):1005-13.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.

Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.