NMNAT1, human recombinant

CATALOG #: 7561-10 10 µg
7561-50 50 µg

ALTERNATE NAMES: Nicotinamide Mononucleotide Adenylyl-transferase 1, NMN Adenylyltransferase 1; NaMN Adenylyltransferase 1; EC 2.7.7.1.

SOURCE: E. Coli

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: ~33.3 kDa (monomer). Human full-length NMNAT1 (aa 1-279) is fused at the N-terminus to a His-tag.

ENDOTOXIN LEVEL: N/A.

FORM: Liquid

FORMULATION: 1 mg/ml in 50 mM sodium phosphate, pH 8.0 containing 300 mM sodium chloride, 2 mM DTT and 10% glycerol.

STORAGE CONDITIONS: Prepare aliquots and store at -20°C. Avoid repeated freeze/thaw cycles.

DESCRIPTION: This is the nuclear NMNAT isoform. It catalyzes the formation of NAD+ from nicotinamide mononucleotide (NMN) and ATP. It can also use the deamidated form of nicotinic acid mononucleotide (NAMN) as substrate with the same efficiency. It interacts with PARP-1/ARTD1. It protects against axonal degeneration following mechanical or toxic insults. It is widely expressed.

BIOLOGICAL ACTIVITY: ≥ 5U/mg protein. One unit is defined as the amount of enzyme that synthesizes 1 µmol of NAD^+ per min.

APPLICATION: Well suited for the synthesis of NAD due to high specific activity and high substrate selectivity compared to NMNAT3 (Cat # 7562-10, -50). For NAD analog synthesis use NMNAT3 (Cat # 7562-10, -50).

Note: When loss of activity is observed add 10 mM DTT to the working buffer and incubate for at least 15 min before the assay.

RELATED PRODUCTS:

- NMNAT3, human recombinant **(Cat. No. 7562-10, -50)**
- NAD/NADH Quantitation Colorimetric Kit **(Cat. No. K337-100)**
- NADP/NADPH Quantitation Colorimetric Kit **(Cat. No. K347-100)**
- PicoProbe™ NADH Fluorometric Assay Kit **(Cat. No. K338-100)**
- PicoProbe™ NADPH Quantitation Fluorometric Assay Kit **(Cat. No. K349-100)**
- NAD Kinase (catalytic domain), human recombinant **(Cat. No. 7559-10)**
- NAD Kinase, human recombinant **(Cat. No. 7560-10)**

FOR RESEARCH USE ONLY! Not to be used in humans.