



NAD Kinase B. subtilis Recombinant Protein

CATALOG NUMBER: 90-364

Specifications

SOURCE SPECIES:	E. coli
SEQUENCE:	Full-length NAD kinase (Bacillus subtilis).
FUSION TAG:	Tag Free
TESTED APPLICATIONS:	
APPLICATIONS:	This recombinant proteins is for research use only.
BIOLOGICAL ACTIVITY:	~2.6 U/mg protein. One unit is defined as the amount of enzyme that synthesizes 1umol nicotinamide adenine dinucleotide phosphate (NADP) per min.

Properties

PURITY:	>98% (SDS-PAGE)
PHYSICAL STATE:	Liquid
BUFFER:	In 50mM TRIS-HCl, pH 7.0 containing 150mM sodium chloride, 1mM EDTA and 1mM dithiothreitol.
CONCENTRATION:	Lot specific
STORAGE CONDITIONS:	Stable for at least 6 months after receipt when stored at -80°C.

Additional Info

ALTERNATE NAMES:	Probable Inorganic Polyphosphate/ATP-NAD Kinase, Poly(P)/ATP NAD Kinase, ppnK, yjbN, EC 2.7.1.23
ACCESSION NO.:	O31612
PROTEIN GI NO.:	8928487

Background

NAD kinase catalyzes the transfer of a phosphate group from ATP to NAD⁺ to generate NADP⁺, which in its reduced form acts as an electron donor for biosynthetic reactions. NADP⁺ is an essential coenzyme in metabolism and provides reducing power to biosynthetic processes such as fatty acid biosynthesis. NAD kinase from Bacillus subtilis is not ATP-dependent but has a broader substrate specificity than human NAD kinase. It can economically produce NADP⁺ by using other nucleoside triphosphates as well as inorganic polyphosphate as a source of phosphorus. Catalytic activity: ATP + NAD⁺ = ADP + NADP⁺

FOR RESEARCH USE ONLY

December 14, 2016