

## NAD Kinase (catalytic domain) from Human, recombinant

Cat. No. NATE-1670

Lot. No. (See product label)

### Introduction

#### Description

NAD kinase catalyzes the transfer of a phosphate group from ATP to NAD<sup>+</sup> to generate NADP<sup>+</sup>, which in its reduced form acts as an electron donor for biosynthetic reactions. NADP<sup>+</sup> is an essential coenzyme in metabolism and provides reducing power to biosynthetic processes such as fatty acid biosynthesis.

#### Synonyms

NADK; Poly (P)/ATP NAD Kinase; EC 2.7.1.23

### Product Information

#### Species

Human

#### Source

E. coli

#### Form

Liquid

#### Formulation

2 mg/mL solution in 20 mM Tris, pH 8 containing 20% glycerol.

#### EC Number

EC 2.7.1.23

#### Molecular Weight

~42 kDa (monomer). Human NAD kinase (aa 64-446) is fused at the N-terminus to a His-tag.

#### Purity

> 95% by SDS-PAGE

#### Activity

> 2U/mg protein

#### Concentration

1 mg/ml

#### Unit Definition

One unit is defined as the amount of enzyme that synthesizes 1  $\mu$ mol of NADP per min.

### Usage and Packaging

#### Reconstitution

Prepare working aliquots by centrifugation and dissolve the pellet in 50 mM Tris-HCl pH 7.5, 150 mM sodium chloride and 1 mM DTT.

### Storage and Shipping Information

#### Storage

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