

Native Bovine Nucleoside 5'-Diphosphate Kinase

Cat. No. NATE-0477

Lot. No. (See product label)

Introduction

Description

Nucleoside-diphosphate kinases are enzymes that catalyze the exchange of phosphate groups between different nucleoside diphosphates. NDK activities maintain an equilibrium between the concentrations of different nucleoside triphosphates such as, for example, when GTP produced in the citric acid (Krebs) cycle is converted to ATP. Nucleoside Diphosphate Kinase exists in two isoforms in eukaryotic cells, NDK-A and NDK-B. These enzymes are found expressed both in the mitochondria and the cytoplasm.

Applications

Nucleoside 5'-Diphosphate Kinase has been used in a study to assess inhibition of type I Fc epsilon receptor mediated Ca²⁺ influx and mediator secretion in rat mucosal mast cells. It has also been used in a study to investigate protein synthesis in rabbit reticulocytes.

Synonyms

nucleoside-diphosphate kinase; nucleoside 5'-diphosphate kinase; nucleoside diphosphate (UDP) kinase; nucleoside diphosphokinase; nucleotide phosphate kinase; UDP kinase; uridine diphosphate kinase; ATP:nucleoside diphosphate phosphotransferase; NDPK; NDKs; NDP Kinase; EC 2.7.4.6; 9026-51-1

Product Information

Species

Bovine

Source

Bovine liver

Form

buffered aqueous glycerol solution

EC Number

EC 2.7.4.6

CAS No.

9026-51-1

Activity

> 1,000 units/mg protein (biuret)

Unit Definition

One unit will convert 1.0 μmole each of TDP and ATP to TTP and ADP per min at pH 7.6 at 25°C in a coupled system with PK/LDH.

Storage and Shipping Information

Storage

2-8°C