

## Native Bovine Guanylate Kinase

Cat. No. NATE-0309

Lot. No. (See product label)

### Introduction

#### Description

In enzymology, a guanylate kinase (EC 2.7.4.8) is an enzyme that catalyzes the chemical reaction:  $\text{ATP} + \text{GMP} \rightleftharpoons \text{ADP} + \text{GDP}$ . Thus, the two substrates of this enzyme are ATP and GMP, whereas its two products are ADP and GDP. This enzyme belongs to the family of transferases, specifically those transferring phosphorus-containing groups (phosphotransferases) with a phosphate group as acceptor. This enzyme participates in purine metabolism.

#### Synonyms

guanylate kinase; deoxyguanylate kinase; 5'-GMP kinase; GMP kinase; guanosine monophosphate kinase; ATP:GMP phosphotransferase; EC 2.7.4.8; 9026-59-9

### Product Information

#### Species

Bovine

#### Source

Bovine brain

#### Form

Lyophilized powder containing potassium phosphate buffer salts

#### EC Number

EC 2.7.4.8

#### CAS No.

9026-59-9

#### Activity

10-40 units/mg protein

#### Pathway

Abacavir metabolism, organism-specific biosystem; Guanine ribonucleotide biosynthesis  $\text{IMP} \Rightarrow \text{GDP, GTP}$ , organism-specific biosystem; Metabolism of nucleotides, organism-specific biosystem

#### Function

ATP binding; guanylate kinase activity

#### Unit Definition

One unit will convert 1.0  $\mu\text{mole}$  each of GMP and ATP to GDP and ADP per min at pH 7.5 at 30°C.

### Storage and Shipping Information

#### Storage

-20°C