

## Polyphosphate Kinase from *Propionibacterium shermanii*, Recombinant

Cat. No. NATE-0912

Lot. No. (See product label)

### Introduction

**Description** Polyphosphate Kinase catalyzes the reversible transfer of phosphate between polyphosphate and ATP. The phosphorylation of ADP to ATP by polyphosphate kinase is by a processive mechanism; the phosphorylation occurs without release of the polymer from the enzyme prior to termination of the reaction.

**Synonyms** Polyphosphate kinase; EC 2.7.4.1; Polyphosphoric acid kinase; ATP-polyphosphate phosphotransferase

### Product Information

**Source** *Propionibacterium shermanii*

**Appearance** Sterile Filtered White lyophilized (freeze-dried) powder.

**EC Number** EC 2.7.4.1

**CAS No.** 9026-44-2

**Molecular Weight** 83 kDa

**Activity** 56.5 U/mg

**Buffer** The protein was lyophilized from 1.15ml PPK solution containing 43.6 U/ml of PPK activity, 0.77 mg/ml total protein, 10mM potassium phosphate pH 6.8 and 25mM sodium polyphosphate.

**Unit Definition** The amount of Polyphosphate kinase required to convert 1  $\mu$ mole ADP to ATP per minute at pH 7.5, using polyphosphate as phosphate donor.

### Storage and Shipping Information

**Stability** Lyophilized Polyphosphate kinase although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PPK should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.