Creative Enzymes®

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 µmole 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.