

Polyphosphate Kinase - Purified

Catalog No.:	AR10718PU-S
Quantity:	50 IU
Background:	PPK 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.
Source:	Propionibacterium shermanii
Format:	State: Sterile filtered white lyophilized (freeze-dried) powder. Buffer System: PPK solution containing 11.54 U/ml of PPK activity, 10.3 mg/ml total protein, 100mM Potassium Phosphate pH 6.8 and 25mM Sodium Polyphosphate. Reconstitution: Restore in 1-10 ml deionized water
Description:	Polyphosphate Kinase purified circa 10 fold . Free of all Polyphosphate Glucokinase activity. Native Molecular Weight = 83 kD (monomer). Biological Activity: The reaction requires Mg ²⁺ . The amount of Polyphosphate kinase required to convert 1µmole ADP to ATP per minute at pH 7.5, using Polyphosphate as phosphate donor. Specific Activity: 1.12 U/mg
Storage:	Lyophilized PPK although stable at RT for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PPK should be stored at 2-8°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 avoid freeze-thaw cycles. Shelf life: One year from despatch.