

**Product:** Polyphosphate GlucoKinase (PPGK), recombinant  
**Catalog #:** 12-4304  
**Amount:** 50 IU

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**DESCRIPTION:** Recombinant Polyphosphate GlucoKinase (rPPGK)  
PPGK catalyzes the phosphorylation of glucose using either inorganic polyphosphate or ATP as the phosphoryl donor. The phosphorylation of glucose plays a significant role in the creation of intermediates for oligosaccharide synthesis. PPGK purified ca 100 fold. Free of all polyphosphate Kinase activity

**SOURCE:** *Propionibacterium shermania*

**MOLECULAR WEIGHT:** 63 kDa (native), subunit MW: 30 kDa

**ISOELECTRIC POINT (pI):** 5.8

**PURITY:** > 90%, as determined by: reducing and non-reducing SDS-PAGE stained Coomassie blue gel and RP-HPLC

**UNIT DEFINITION:** One IU of PPGK is defined as that amount of enzyme required to convert 1  $\mu$ mol of glucose to glucose-6-phosphate per minute at pH 7.4 and 30°C, in phosphate buffer using polyphosphate as phosphate donor.  
Required cofactor: Mg<sup>++</sup>

**BIOLOGICAL ACTIVITY:** 10-40 U/mg

**ENZYMOLOGICAL PROPERTIES:** T (optimum) = 50°C  
pH optimum = 9-10

**FORM:** Purified, in polyphosphate and phosphate buffer

**STORAGE:** -20°C (aliquot), avoid freezing and thawing cycles

**REFERENCE:** Prog. Mol Subcell Biol (1999), 23: 101-25

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