



## $\alpha$ -PHOSPHOGLUCOMUTASE (microbial) (Lot 120604c)

### **Recombinant**

### **E-PGM**

12/16

(EC 5.4.2.2) alpha-D-glucose 1,6-phosphomutase

### **PROPERTIES**

#### **1. ELECTROPHORETIC PURITY:**

- Single band on SDS-gel electrophoresis (MW ~ 59,200)
- Single major band on isoelectric focusing (pI ~ 5.7)

#### **2. SPECIFIC ACTIVITY:**

**156 U/mg protein at pH 7.4 and 25°C;**  
~317 U/mg protein at pH 7.4 and 37°C.

**One Unit** of  $\alpha$ -phosphoglucomutase is defined as the amount of enzyme required to produce one  $\mu$ mole of NADPH from NADP<sup>+</sup> per minute under the following assay conditions:

Glycylglycine buffer, pH 7.4	70 mM
MgCl <sub>2</sub>	7.0 mM
L-Cysteine	45 mM
$\alpha$ -D-Glucose 1-phosphate	5.2 mM
$\alpha$ -D-Glucose-1,6-bisphosphate	0.05 mM
NADP <sup>+</sup>	0.7 mM
D-Glucose 6-phosphate dehydrogenase	8 U/mL

#### **3. PHYSICOCHEMICAL PROPERTIES:**

Recommended conditions of use are at pH 6.5 - 8.0 and 25°C - 37°C.

pH Stability: 6.0 - 9.0 (> 75% control activity after 24 hours at 4°C)

Temperature Stability: up to 40°C (> 90% control activity after 15 min.)

#### **4. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:**

The enzyme is supplied as a solution containing 50% glycerol plus 0.02% (w/v) sodium azide and should be stored below -10°C. For assay, this enzyme should be diluted in glycylglycine buffer (100 mM), pH 7.4 containing 0.5 mg/mL BSA.