GLYCEROL 3-PHOSPHATE OXIDASE (microbial) (Lot 150901a)

Recombinant **09/15**

E-GPO

(EC 1.1.3.21) sn-glycerol-3-phosphate:oxygen 2-oxidoreductase

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 68,000)
- Single major band on isoelectric focusing (pI ~ 5.0)

2. SPECIFIC ACTIVITY:

3.1 U/mg protein at pH 7.0 and 37°C

One Unit of glycerol 3- phosphate oxidase is defined as the amount of enzyme required to oxidise one µmole of DL-α-glycerophosphate to dihydroxyacetone phosphate per minute under the following assay conditions:

Potassium phosphate buffer, pH 7.0	100 mM
Phenol	0.02% (w/v)
4-Aminoantipyrine	0.03% (w/v)
Peroxidase	6.2 U/mL
Magnesium Chloride	6.4 mM
Glycerol	3.2 mM
Glycerokinase	0.5 U/mL
ATP	2.9 mM

3. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 7.0 and 37°C.

4. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:

The enzyme is supplied as an ammonium sulphate suspension and should be stored at 4°C. For assay, this enzyme should be diluted in potassium phosphate buffer (100 mM), pH 7.0 containing 1 mg/mL BSA. **Swirl to mix the enzyme suspension immediately prior to use.**