



## ACID PHOSPHATASE from *E. coli* (Lot 90101b)

**Recombinant**

**E-ACPEC**

(EC 3.1.3.2) Orthophosphoric-monoester phosphohydrolase (acid optimum)

CAS: 9001-77-8

06/18

### PROPERTIES

#### 1. ELECTROPHORETIC PURITY

- Single band on SDS-gel electrophoresis (MW ~ 24,667)
- Single major band on Isoelectric focusing (pI ~ 6.5)

#### 2. SPECIFIC ACTIVITY

**20 U/mg protein at pH 5.0 and 40°C**

**One Unit** of acid phosphatase is defined as the amount of enzyme required to produce one  $\mu$ mole of *p*-nitrophenol from 4-nitrophenyl phosphate per minute at 40°C measured at 410 nm under the following assay conditions:

Sodium acetate buffer, pH 5.0	20 mM
4-Nitrophenyl phosphate (4-NPP)	4 mM
MgCl <sub>2</sub>	1 mM
ZnSO <sub>4</sub>	0.1 mM

#### 3. SPECIFICITY:

Catalyses the reaction:

A phosphate monoester + H<sub>2</sub>O = an alcohol + phosphate.

#### 4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 5.0 and up to 45°C.

pH Optimum: 5.0  
Temperature Optimum: 45°C

#### 5. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension containing 1 mM magnesium chloride and 0.1 mM zinc sulphate and should be stored at 4°C. For assay, this enzyme should be diluted in assay buffer containing 0.5 mg/mL BSA, 1 mM magnesium and 0.1 mM zinc. **Swirl to mix the enzyme suspension immediately prior to use.**