ACID PHOSPHATASE from *E. coli* (Lot 180601a)

Recombinant

E-ACPEC **08/20**

(EC 3.1.3.2) Orthophosphoric-monoester phosphohydrolase (acid optimum)
CAS: 9001-77-8

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

14 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 µmole 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
$MgCl_2$	1 mM
$ZnSO_4$	0.1 mM

3. PHYSICOCHEMICAL PROPERTIES:

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

pH Optimum:	5.0
Temperature Optimum:	45°C

4. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:

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.**