



# Alkaline Phosphatase

(Calf Intestine)

Cat. No.	size
E1025-01	1000 u
E1025-02	5000 u

#### **Unit Definition:**

One unit is the amount of enzyme required to hydrolyze 1  $\mu$ mol of p-nitrophenylphosphate to p-nitrophenol in 1 min at 37°C in a buffer of 1 M diethanolamine, 10 mM p-nitrophenylophosphate, 0.25 mM MgCl<sub>2</sub> (pH 9.8) (2).

# **Storage Conditions:**

Store at -20°C.

#### References:

- 1.Sambrook, J. et al. (1989) Molecular cloning: A laboratory Manual, second edition, pp.5.72, Cold Spring Harbor, New York.
- 2.Mosser, E., Boll, M. and Pfleiderer, G. (1980) Hoppe-Seyler's Z. Physiol. Chem. 361, 543-549.

Calf intestine derived phosphatase which catalyzes the hydrolysis of phosphate monoesters.

### **Description:**

- Has higher turnover rate and milder conditions of inactivation than bacterial enzyme (1).
- Can be used to remove 5'-phosphates from DNA or RNA prior to 5'-end labeling
  (1).
- Used to remove 5'-phosphates from linearized vector molecules to prevent selfligation of the vector during cloning procedures (1).
- · Applicable to dephosphorylation of proteins.

#### **Storage Buffer:**

10 mM Tris-HCl (pH 8.0 at 22°C), 50 mM KCl, 1 mM MgCl $_2$ , 0.1 mM ZnCl $_2$  and 50% (v/v) glycerol.

## **Quality Control:**

All preparations are assayed for contaminating endonuclease, nonspecific RNase and single- and double-stranded DNase activities.