## **Technical Datasheet**

## **Alkaline Phosphatase**

(Calf Intestine)

Cat No:	PM-1025-01	Pack size:	1000U
Concentration:	U/μΙ	Lot No:	
Protein (Lowry):	mg/ml	Storage:	Store at -20°C.
Unit Definition:	One unit is the amount of enzyme required to hydrolyse 1µmole of p-nitrophenylphosphate in 1 min at 37°C.		
Reaction Buffer:	1.0 M diethanolamine, pH 9.8, 10 mM p-nitrophenylphosphate. 0.25 mM MgCl $_{\rm 2}$ .		
Storage Buffer:	10 mM Tris-HCl, pH 8.0, 1 mM MgCl $_{\!2},$ 50 mM KCl, 0.1 mM ZnCl $_{\!2}$ and 50% glycerol.		
Storage:	Store CIAP at –20°C.		

## QUALITY CONTROL:

Endonuclease: incubation of 5, 10 and 20U of enzyme with 0.5μg of pBR322 DNA at 37°C for 1 hour resulted in <5% conversion of RFI to RFII DNA. Reaction volume 10μl.

<u>DNase</u>, <u>double-stranded</u>: incubation of 10, 20 and 40U of Alkaline Phosphatase with  $0.015\mu g$  of phosphate of [ $^{33}$ P]lambda DNA for 1 hour at 37°C resulted in 0.004 slope %-end released per unit of enzyme. Reaction volume  $20\mu l$ .

<u>DNase</u>, <u>single-stranded</u>: incubation of 10, 20 and 40U of Alkaline Phosphatase with 0.015μg of phosphate of heat denatured [<sup>33</sup>P]lambda DNA for 1 hour at 37°C resulted in 0.002 slope %-end released per unit of enzyme. Reaction volume 20μl.

RNase: incubation of 10, 20 and 40U of Alkaline Phosphatase with 0.015 $\mu$ g of [ $^{33}$ P] RNA transcript for 1 hour at 37°C resulted in 0.026 slope %-end label released per unit of enzyme. Reaction volume 50 $\mu$ l.