

Alkaline phosphatase (4U/ul)

Catalog # ALE-A5113



Product Details

Alkaline Phosphatases (APs) is derived from Antarctic bacterium and expressed in *E. coli*. APs nonspecifically catalyzes the dephosphorylation of 5' and 3' ends of DNA and RNA phosphomonoesters. Also, APs Hydrolyses ribo-, as well as deoxyribonucleoside triphosphates (NTPs and dNTPs).

Application

- Dephosphorylation 5' and 3' ends of DNA and RNA.
- Dephosphorylation of cloning vector DNA to prevent recircularization during ligation.
- Dephosphorylation of DNA prior to end-labeling using T4 Polynucleotide Kinase.
- Treatment of dNTPs in PCR reactions prior to sequencing or SNP analysis.

Unit Definition

One unit is defined as the amount of enzyme that will dephosphorylate 1 µg of pUC19 vector DNA cut with a restriction enzyme generating 5' recessed ends in 30 minutes at 37°C.

Purity

>90% as determined by SDS-PAGE.

Notes

- Alkaline Phosphatase is inhibited by metal chelators (e.g. EDTA), inorganic phosphate and phosphate analogs.
- Alkaline Phosphatase activity is decreased in the presence of reducing agents (DTT, β-ME).

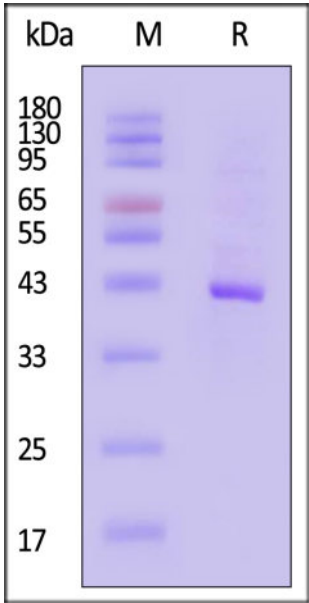
Formulation

- Supplied as 0.2 µm filtered solution in 10 mM Tris, pH7.4 with glycerol as protectant.
- Contact us for customized product form or formulation.

Shipping and Storage

- This product is supplied and shipped on dry ice.
- This product is stable after storage at:
 - The product MUST be stored at -20°C or lower upon receipt.
 - -20°C for 12 months under sterile conditions.

SDS-PAGE



The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).



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