



For research use only

ISO9001

Lambda Exonuclease

Product	Quantity	Cat. No.	Remarks
Lambda Exonuclease	1,000 unit	EBT-3020	5 unit/ μ l

Description

Lambda exonuclease catalyzes the removal of 5' mononucleotides from duplex DNA (5' \rightarrow 3'). The preferred substrate is 5'-phosphorylated double stranded DNA, although it will also degrade single-stranded and non-phosphorylated substrates at a greatly reduced rate. Lambda exonuclease is unable to initiate DNA digestion at nicks or gaps.

Applications

Generation of single-stranded PCR products for use in:

- DNA Sequencing.
- SSCP (single-strand conformation polymorphism) Analysis.

Single-stranded PCR products are produced by first performing PCR where only one of the two primers contains a 5'-phosphate. Following PCR amplification, the phosphorylated strand of the PCR product is removed by digestion with lambda exonuclease.

Concentration & Storage Condition

5 unit/ μ l. Store at -20°C.

Storage Buffer

25 mM Tris-HCl, pH 8.0, 50 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50 μ g/ml BSA and 50% glycerol.

10x Reaction Buffer

670 mM Glycine-KOH, pH 9.4, 25 mM MgCl₂ and 500 mg/ml BSA.

Unit Definition

One unit is defined as the amount of enzyme required to produce 10 nmole of acid-soluble dNTP from double-stranded substrate in a total reaction volume of 50 μ l in 30 min at 37°C in 1x Lambda exonuclease reaction buffer with 1 μ g sonicated duplex [³H]-DNA.

QC Tests

Activity, exo and endonuclease activity test, SDS-PAGE purity, performance tests.



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