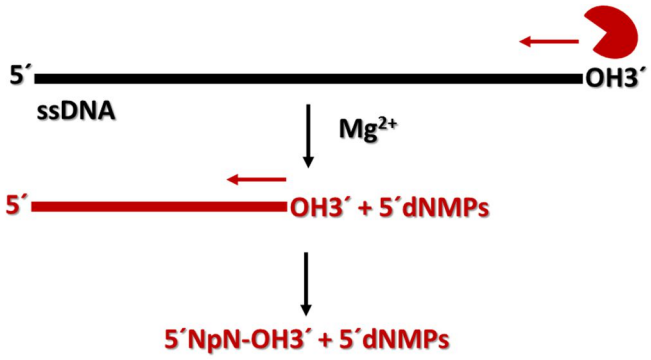
Data sheet

Exonuclease I (E. coli)

Cat. No: EZ0016 5000 U (20U/µL)
Cat. No: EZ0017 20 000 U (20U/µL)

Introduction

Exonuclease I, the product of the sbcB gene of *E. coli*, is an exodeoxyribonuclease that hydrolyzes single-stranded DNA (ssDNA) stepwise in a 3'→5' direction releasing 5'-mononucleotides and leaving the terminal 5'-dinucleotide intact.



It does not cleave DNA strands with terminal 3'-OH groups blocked by phosphoryl or acetyl groups.
Exonuclease I is tolerant of a wide-range of buffer conditions and can typically be added to reactions containing magnesium (optimal Mg^{2+} concentration is 10 mM)

Features:

Purified from a strain of *E. coli* that expresses the recombinant Exonuclease I gene.
Exonuclease I Supplied with 10x reaction buffer (670 mM Glycine-KOH, 67 mM MgCl2, 100 mM 2-mercaptoethanol (pH9.5, 25°C)).

Applications

Exonuclease I degrades excess single-stranded primer oligonucleotide from a reaction mixture containing double-stranded extension products.

Kit Contents

- Exonuclease I (20 U/µL)
- 10X Exonuclease I Reaction Buffer

Exo I is available in 5000 and 20000 Unit sizes at a concentration of 20 Units/µl.

Storage

Storage at –20 °C in a non-frost free freezer.

Unit Definition

One unit is defined as the amount of enzyme required to produce 10 nmol of acid-soluble total nucleotide in 30 minutes at 37°C.

Quality Control

Exonuclease I is tested in degradation of ssDNA and is free of detectable RNase, endonuclease, and doublestranded exonuclease activities.

Protocol

Set-up the reaction as follows:

DNA	up to 1 µg
10X Exonuclease I Reaction Buffer	5 µl
Exonuclease I, *E.coli*	1 µl (20 units)
Water	up to 50 µl

- Incubate at 37ºC for 1-4 hour.
- Heat inactivate: 80°C for 20 min.

Canvax Biotech, S.L. C/Astrónoma Cecilia Payne. Edif. Canvax. 14014 Córdoba, Spain.
☎ : +34 957 348 066
🖷 : +34 957 346 217
✉ : info@canvaxbiotech.com

Notes:

PRODUCT USE LIMITATION

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals. Please refer to **www.canvaxbiotech.com** for Material Safety Data Sheet of the product.

Canvax Biotech, S.L. C/Astrónoma Cecilia Payne. Edif. Canvax. 14014 Córdoba, Spain.
☎ : +34 957 348 066
🖷 : +34 957 346 217
✉ : info@canvaxbiotech.com