

## E. coli Exonuclease I

**CATALOG NO.:** M1222-100  
**AMOUNT:** 2000 U (100 µl)  
**CONCENTRATION:** 20 U/µl  
**FORM:** Liquid. Enzyme supplied with 10X Reaction Buffer

**COMPONENTS:**

Product Name	Size	Part. No.
<i>E. coli</i> , Exonuclease I (20 U/µl)	100 µl	M1222-100-1
10X Exonuclease I Reaction Buffer	500 µl	M1222-100-2

**DESCRIPTION:** *E. Coli* Exonuclease I catalyzes the removal of nucleotides from single-stranded DNA in the 3'→5' direction, releasing deoxyribonucleoside 5'-monophosphates and leaving 5'-terminal dinucleotides intact. Hydrolysis cannot proceed if the 3'-terminus is phosphorylated.

**APPLICATIONS:**

- Removal of single-stranded primer oligonucleotides from
  - PCR mixtures for applications involving sequencing or labelling
  - From nucleic acid mixtures:
- Assaying for the presence of single-stranded DNA with a 3'-hydroxyl terminus

**STORAGE CONDITIONS:** Store at -20°C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for one year from the date of shipping when stored and handled properly.

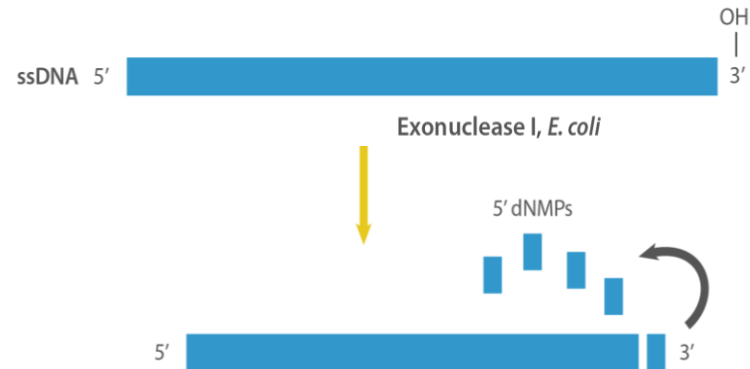
**ENZYME STORAGE BUFFER:** 20 mM HEPES (pH 7.1), 150 mM NaCl, 1 mM DTT, 1 mM EDTA, 50% (v/v) Glycerol

**ENZYME UNIT DEFINITION:** One unit is defined as the amount of Exonuclease I, *E. coli* that is required to catalyze the release of 10 nmol of acid soluble nucleotides from heat-denatured DNA in 30 minutes at 37°C in 1X Exonuclease I Reaction Buffer.

**10X EXONUCLEASE I REACTION BUFFER:** 670 mM Glycine-KOH, 67 mM MgCl<sub>2</sub>, 100 mM β-ME, pH 9.5

**REACTION CONDITIONS:** Use 1X Exonuclease I, *E. coli* Reaction Buffer and incubate at 37°C.

**HEAT INACTIVATION:** 80°C for 20 minutes



**RELATED PRODUCTS:**

- *E. coli* DNA Ligase (Cat# M1217-100)
- Link-FAST™ 5 Minutes DNA Ligation Kit (Cat# K902-50)
- New T4 DNA Ligase (Cat# M1247-200)
- T4 DNA Ligase (5 u/µl) (Cat# 9101-250)
- T4 RNA Ligase 1 (ssRNA Ligase) (Cat# M1218-100)
- T4 RNA Ligase 2 (dsRNA Ligase) (Cat# M1219-100)
- T4 RNA Ligase 2 (Truncated) (Cat# M1220-100)

**FOR RESEARCH USE ONLY! Not to be used on humans.**