

T7 Endonuclease I

CATALOG NO.: M1221-100
AMOUNT: 1000 U (100 µl)
CONCENTRATION: 10 U/µl
PRODUCT SOURCE: Recombinant *E. coli*
FORM: Liquid. Enzyme supplied with 10X Reaction Buffer

COMPONENTS:

Component Name	Size	Part. No.
T7 Endonuclease I (10 U/µl)	100 µl	M1221-100-1
10X T7 Endonuclease I Reaction Buffer	500 µl	M1221-100-1

DESCRIPTION: T7 Endonuclease I recognize and cleaves mismatched DNA, heteroduplex DNA, cruciform DNA, Holliday structures and/or junctions, as well as nicked double-stranded DNA. This enzyme has a preference for single stranded over double stranded DNA with cleavage occurring at the first, second or third phosphodiester bond that is 5' to the mismatch.

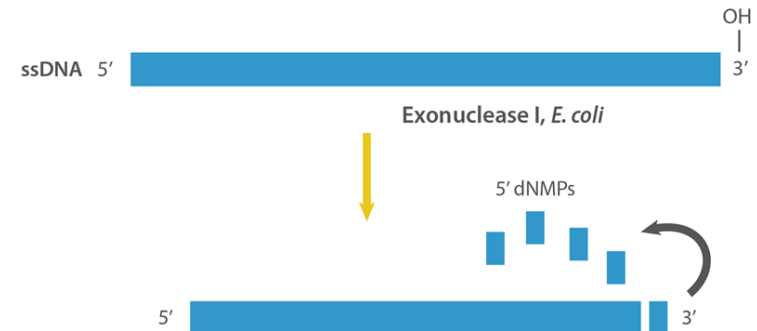
APPLICATIONS:

1. Mutation detection assay
2. Detect and cleave heteroduplex and/or nicked DNA
3. Cleave DNA randomly for use in shotgun cloning

ENZYME STORAGE BUFFER: 25 mM Tris-HCl (pH 7.5), 200 mM NaCl, 0.1 mM EDTA, 1 mM DTT, 0.15% Triton®X-100 and 50% (v/v) Glycerol

ENZYME UNIT DEFINITION: One unit is defined as the amount of T7 Endonuclease I that linearizes over 90% of 1 µg of supercoiled cruciform DNA in a 50 µl volume in 1 hour at 37°C.

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.



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.