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T7 Endonuclease I

Store at -20°C

Cat. No.	Description	Concentration	Quantity
E028	T7 Endonuclease I	10 U/ μ l	1000 U (100 μ l)

Product Description

T7 Endonuclease I recognizes 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.

Kit Components

Part No.	Product Components	1000 U
E028-1	T7 Endonuclease I (10 U/ μ l)	100 μ l
E028-2	10X T7 Endonuclease I Reaction Buffer	500 μ l

Product Applications

- Mutation detection assay
- Detect and cleave heteroduplex and/or nicked DNA
- Cleave DNA randomly for use in shotgun cloning

Product Source

Recombinant *E. coli*.

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 μ g of supercoiled cruciform DNA in a 50 μ l volume in 1 hour at 37°C.

Storage Conditions

Store all components at -20°C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for 1 year from the date of shipping when stored and handled properly.

10X T7 Endonuclease I Reaction Buffer Components

100 mM Tris-HCl, 500 mM NaCl, 100 mM MgCl₂, 10 mM DTT, pH 7.9.

Reaction Conditions

Use 1X T7 Endonuclease I Reaction Buffer and incubate at 37°C.

Heat Inactivation

No.

For laboratory research only. Not for clinical applications.
For technical questions, please email us at technical@abmgood.com
or visit our website at www.abmGood.com