



For research use only

ISO9001

T7 Endonuclease I

Product	Quantity	Cat. No.	Remarks
T7 Endonuclease I	500 unit	EBT-3027	10 unit/ μ l

Description

T7 Endonuclease I, product of T7 gene 3, also known as junction-resolving enzyme, selectively binds and cleaves cruciform DNA structures, four-way (Holliday structures) DNA junctions, heteroduplex DNA and nicked double-stranded DNA. The cleavage site is at the first, second or third phosphodiester bond that is 5' to the mismatch. T7 Endonuclease I is expressed and purified from E.coli.

Applications

- Resolve four-way junction or branched DNA.
- Detect or cleave heteroduplex and nicked DNA.
- Randomly cleave linear DNA for shot-gun cloning.

Reagents Supplied & Storage Condition

- T7 Endonuclease I : 10 unit/ μ l, Store at -20°C.
- 10x T7 Endonuclease I Reaction Buffer : Store at 4°C.

Reaction Condition

T7 Endonuclease I in 1X T7 Endonuclease I Reaction Buffer. Incubate at 37°C.

10x Reaction Buffer

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

Storage Buffer

20 mM Tris-HCl (pH 7.5), 200 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.1% Triton® X-100

Unit Definition

One unit is defined as the amount of enzyme required to convert > 90% of 1 μ g of supercoiled cruciform pUC(AT) to > 90% linear form in a total reaction volume of 50 μ l in 1 hour at 37°C.

QC Tests

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



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