

Certificate of Analysis

PRODUCT: T7 Endonuclease I

CAT. NO. AMOUNT LE101 250 units

LOT NUMBERQ10923

SHELF LIFE
One year

STORAGE CONDITIONS SHIPPING CONDITIONS

at -20 °C for two years Dry ice

DESCRIPTION

T7 Endonuclease I is a junction-resolving enzyme of 149 amino acid residue, encoded by gene 3 of bacteriophage T7, existing as a stable dimer. Not only does it selectively bind and cleave four-way DNA (Holliday) junctions with high specificity for branched structures in double-stranded DNA, such as cruciform DNA, but also it has a strong preference for cutting single-stranded DNA. It requires metal ions such as magnesium for activity. This product is purified from *E. coli* expressing the recombinant T7 Endonuclease I (T7EI) gene.

PACKAGE CONTENTS

Component	LE101-01	LE101-02
T7 Endonuclease I	250 units	5×250 units
10×T7 Endonuclease I Buffer	200 μl	5×1 ml
T7 Endonuclease I Control Template (40 ng/μl)	20 µl	20 μl
10×DNA Loading Buffer	1 ml	1 ml

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QUALITY CONTROL DATA

Assay	Standard	Result
Appearance	Each liquid component is clear without precipitates or floccules.	Met standards
Function	In a 20 μl reaction system, 0.5 μl of the enzyme of this batch is incubated with 200 ng of substrate containing the Holliday structure for 20 min at 37 °C. The result is consistent or comparable with that of the control batch.	Met standards
Non-specific endo/exonuclease activity	The purified blunt-end PCR products and plasmids are incubated with 2 U of the enzyme for 2 h at 37 °C, respectively. The results are not significantly different from that of the control batch.	Met standards

Notice to Purchaser



All products are for research use only. Caution: Not intended for human or animal diagnostic or therapeutic uses. If you have any further questions about this Certificate of Analysis, please contact us at +86-10-57815027 or +86-400-898-0321.

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