

Product components

Components	Component number	Concentration	250 U	1,250 U
Exonuclease T	RM20576	5,000 U/mL	50 µL	250 µL
10X ABuffer S	RM20147	10X	1.25 mL	1.25 mL

Product Description

Exonuclease T is a single-strand-specific exonuclease that catalyzes the degradation of linear single-stranded DNA or RNA in the 3' to 5' direction.

It is applicable to:

- Digest the 3' overhangs of double-stranded DNA to generate blunt-ends.
- Remove single-stranded primers from the PCR reaction prior to DNA sequencing or SNP analysis.
- Remove the single-stranded DNA from the sample while retaining the double-stranded DNA.

Notes

1. Exonuclease T has different activities against RNA and ssDNA.
2. RNA molecules containing cytosine (C) bases at the 3' end may be difficult to digest by Exonuclease T.
3. Exonuclease T excises ssDNA from 3' protrusions in dsDNA, but does not act on two adjacent deoxycytosine (dCs) residuals.

Product Source

Purified from *E.coli* strain carries Exonuclease T gene.

Storage

-20°C

Unit Definition

One unit is defined as the amount of enzyme required to produce 1 nmol of a single thymine nucleotide in a total reaction volume of 20 µL in 30 minutes at 25°C in 1X ABuffer S with a 50 pmol fluorescently labeled polythymidine substrate.

Reaction Conditions

1X ABuffer S, incubate at 25°C

1X ABuffer S

50 mM Potassium Acetate, 20 mM Tris-acetate, 10 mM Magnesium Acetate, 1mM DTT, pH 7.9 @25°C

Storage Conditions

10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.2 mg/mL Recombinant Albumin, 50% glycerol, pH 7.4 @25°C

Heat Inactivation

65°C for 20 min