Tinzyme Co., Limited

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TelN Protelomerase

Product Number: TE101

Shipping and Storage

Storage at -20±5℃.

Component

Component	TE101
TelN Protelomerase (5U/μL)	200μL
10×TelN Reaction Buffer	1mL

Description

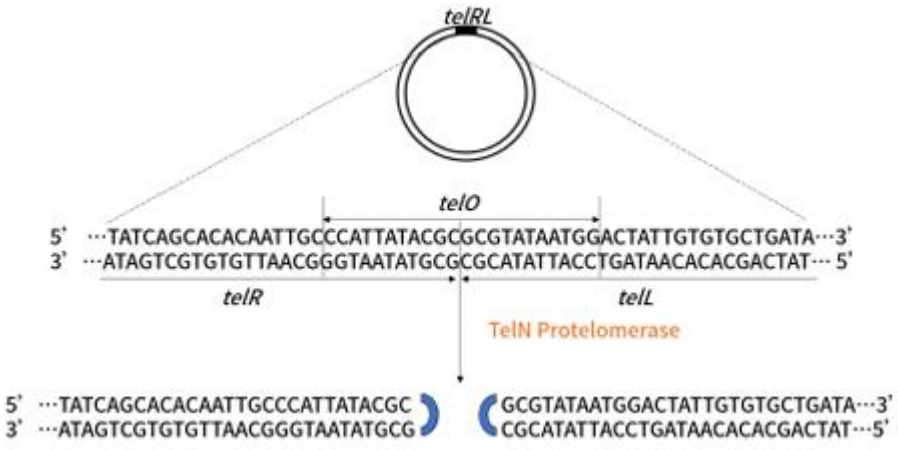
This product is a protein cloned from the TelN Protelomerase gene expression of phage N15. It can specifically recognize the telRL sequence (56bp) on dsDNA, cleave dsDNA, and form a covalently closed end at the cleavage site, effectively transforming circular DNA into linear DNA with a closed end. The closed ended linear DNA generated by TelN Protelomerase treatment has stable performance, long half-life, and only introduces two 28 bp short sequences except for necessary sequences. It can encode long, complex, or unstable DNA sequences, does not contain bacterial sequences, and has a strong expression profile.

Application

This product can be used in fields such as DNA vaccine development, mRNA vaccine development, virus vector preparation, DNA data storage, etc.

Features

This product has strong specificity and can specifically cleave the recognized DNA sequence (telRL) to form a covalently closed end. The recognition sequence is as follows:



Unit definition

1 unit refers to the amount of enzyme required to cleave 0.5μg BsaI linearized plasmid (313fmol telRL recognition site) in a 50μL 1 × TelN Reaction Buffer reaction buffer system at 30℃ for 30 minutes.

Note

1. The recognition site of TelN Protelomerase is not a palindrome sequence, and there is a difference of 3 bases between telR and telL sequences;

2. Incubation time exceeding 30 minutes will not increase the enzymatic efficiency of this enzyme;
3. Try to minimize the exposure time of enzymes above -20℃.

Protocol

1. Recommended reaction system:

Component	Volume
10×TelN Reaction Buffer	2μL
DNA (<300fmol of telRL sites)	XμL
TelN Protelomerase (5U/μL)	1μL
RNase Free Water	Up to 20μL

2. Reaction conditions: 30℃, 30min.
3. Heat inactivation: 75℃, 5 minutes.