

TelN Protelomerase

T767021

Product Component 250 U 1000 U

TelN Protelomerase	25 μ L	100 μ L
10 $\times$ TelN Reaction Buffer	250 μ L	1mL

Storage/Transportation Condition Store at -20°C for up to 12 months. Avoid repeated freeze/thaw cycles. Transport on dry ice.

Form Liquid

Source E.coli strain that carries TelN from phage N15

Storage Buffer 10 mM Tris-HCl, 100 mM NaCl, 0.1 mM EDTA, 1 mM DTT, 50% Glycerol, pH 7.4

10X TelN Reaction Buffer 200 mM Tris-HCl, 100 mM (NH₄)₂SO₄, 100 mM KCl, 20 mM MgSO₄, 1% Triton X-100, pH 8.8

Concentration 10U/ μ L

Unit Definition One unit is defined as the amount of enzyme required to cleave 0.5 μ g of BsaI linearized pMiniT-TelN control plasmid (313 fmol TelN recognition site) in a total reaction volume of 50 μ L at 30°C for 30 minutes.

Product Description

TelN Protelomerase is cloned from bacteriophage N15. TelN cuts dsDNA at the recognition site TelRL (56 bp), which consists of a palindromic sequence-TelO in the middle and palindromic sequences R3 and L3 at both ends of 14 bp form (Figure 1). TelN has cutting-ligating enzyme activity and covalently ligates at the cleavage site forming hairpin termini (Figure 2).

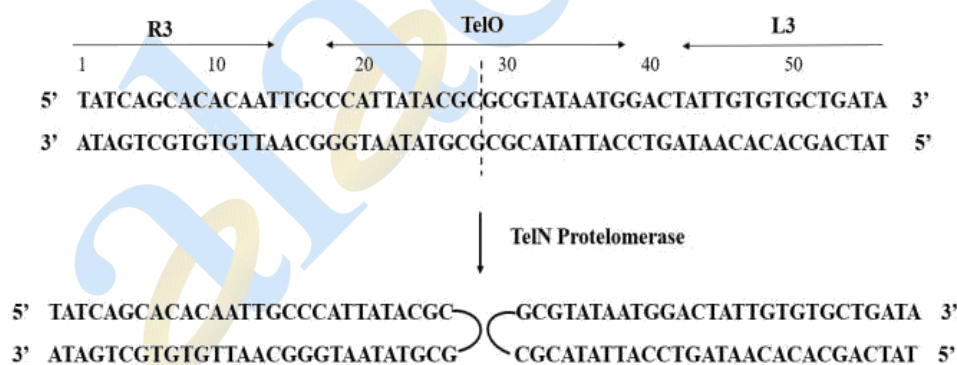


Figure 1. TelRL site

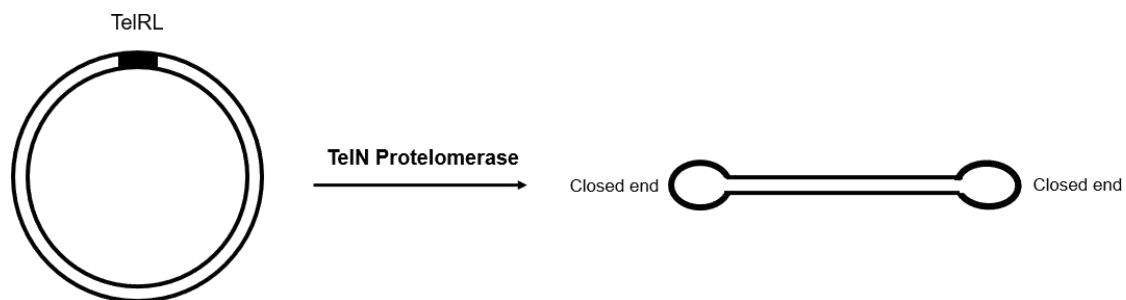


Figure 2. Circular Plasmid Linearization

Applications

In vitro enzymatic synthesis of DNA constructs.

Recommended Protocol for Digestion

1. Make the reaction mixture according to the table below:

Reagent	Quantity
dsDNA	X μ g
10X TelN Reaction Buffer	2 μ L
TelN Protelomerase (10U/ μ L)	1 μ L
Nuclease-free H ₂ O	Up to 20 μ L

2. Gently mix the reaction by pipetting up and down and spin for a few seconds.

3. Incubate at 30°C for 30 minutes.

4. Heat inactivation at 75°C for 5 minutes.

Notes

1. For research use only.