

Klenow Fragment (3'→5' exo-)

Instruction for Use

Cat. No./Spec.: K010-A/100U; K010-B/200U; K010-C/1,000U

Concentration: 5U/μL

Product Description

Klenow Fragment (3'→5' exo-) is an N-terminal truncation of DNA Polymerase I which retains polymerase activity, but has lost the 5'→3' exonuclease activity and has mutations which abolish the 3'→5' exonuclease activity.

Components

Component	K010-A (100U)	K010-B (200U)	K010-C (1,000U)
Klenow Fragment (3'→5' exo-) (5U/μL)	20 μL	40 μL	200 μL
10X Klenow Buffer	1.25 mL	1.25 mL	1.25 mL

Storage Condition & Shelf Life

All reagents should be stored at -20°C. The product is valid for 24 months.

Source

Recombinant *E. coli* strain.

Unit Definition

One unit is defined as the amount of enzyme that will incorporate 10 nmol of dNTP into acid insoluble material in 30 minutes at 37°C.

Scope of Application

1. Generates probes using random primers

2. Random priming labeling
3. dA-tailing at 3' end
4. Second strand cDNA synthesis

Heat Inactivation

75°C for 20 minutes

Notes

1. Klenow Fragment (3'→5' exo-) cannot remove the 3' overhangs because its activity of 3'→5' exonuclease has been removed, so it is not suitable for reactions that generate blunt ends.
2. The enzyme should be placed on ice when using, and it should be put back to -20 °C immediately after use.

This product is for research use only.