

DNA Polymerase I (20 U/µL)

Product Information

| Product Name | Cat# | Size |
|----------------------------|-----------|-------|
| | 14452ES03 | 1 mL |
| DNA Polymerase I (20 U/µL) | 14452ES10 | 10 mL |
| | 14452ES50 | 50 mL |

Product Description

DNA Polymerase I, in the presence of template and primer (DNA or RNA), uses dNTP as a substrate to synthesize DNA complementary to the template in the $5'\rightarrow 3'$ direction. The molecular weight of this enzyme is about 109,000 Da, and it has double-strand-specific $5'\rightarrow 3'$ exonuclease activity and single-strand-specific $3'\rightarrow 5'$ exonuclease activity. This enzyme can be used with DNase I (Cat#10607) for nick translation reaction and with RNase H (Cat#12906) to synthesize the second strand of cDNA.

Product Components

| Component number | Component | Cat#/Size | | |
|------------------|----------------------------|-----------|-----------|-----------|
| Component number | Component | 14452ES03 | 14452ES10 | 14452ES50 |
| 14452-A | DNA Polymerase I (20 U/µL) | 1 mL | 10 mL | 50 mL |

Unit Definitions

1 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.

Applications

Labeling 3'-termini of nucleic acids Nick translation of DNA Second strand synthesis of cDNA

Shipping and Storage

The product is shipped with dry ice and can be stored at -20°C for two years.

Cautions

1. For your safety and health, please wear lab coats and disposable gloves for operation.

2. This product is for research use ONLY!