

DNA Polymerase I

Product Information

Product Name	Cat#	Size
	12903ES60	500 U
DNA Polymerase I	12903ES76	2500 U
	12903ES92	10,000 U

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

Componen	Components		Cat#/Size		
t number	Components	12903ES60	12903ES76	12903ES92	
12903-A	DNA polymerase I	50 µL	250 μL	1 mL	
12903-В	$10 \times$ DNA Polymerase I Reaction Buffer	1 mL	$1 \times 5 \text{ mL}$	4×5 mL	

*10× DNA Polymerase I Reaction Buffer: 500 mM Tris-HCl (pH 7.5 at 25 °C), 100 mM MgCl₂, 10 mM DTT.

Shipping and Storage

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

Product Application

Labeling 3'-termini of nucleic acids

Nick translation of DNA

Second strand synthesis of cDNA

Cautions

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

2. This product is for research use ONLY!