

# **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 MgCl<sub>2</sub>, 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!