



## T4 DNA Polymerase

### Product Information

<b>MW</b>	105 kDa (Reducing)
<b>Cat#</b>	POL-002
<b>Form</b>	Liquid
<b>Label</b>	His Tag
<b>Notes</b>	Elevated temperatures, excessive amounts of enzyme, failure to supplement with dNTPs or long reaction times will result in recessed ends due to the 3'→5' exonuclease activity of the enzyme.
<b>Purity</b>	> 95% by SDS-PAGE and HPLC
<b>Storage</b>	Store at -25 ~ -15°C for 2 years.
<b>Activity</b>	3 U/μL
<b>Synonyms</b>	DNA-directed DNA polymerase
<b>Component</b>	3 U/μL / T4 DNA Polymerase, 100 mM K3PO4, 1 mM DTT, 50% Glycerol, pH 6.5 at 25°C
<b>Description</b>	T4 DNA polymerase catalyzes the synthesis of DNA in the 5'→3' direction and requires the presence of template and primer. This enzyme possesses 3'→5' exonuclease activity, which is much higher than that found in DNA polymerase I (E. coli). Unlike E. coli DNA polymerase I, T4 DNA polymerase lacks 5'→3' exonuclease activity.
<b>Applications</b>	T4 DNA polymerase can be used to Removal of 3' overhangs or fill-in of 5' overhangs to form blunt ends.
<b>Specification</b>	150 U; 750 U
<b>Dilution Buffer</b>	100 mM K3PO4, 1 mM DTT, 50% Glycerol, pH 6.5 at 25°C
<b>Molecular Marker</b>	Unconjugated
<b>Expression System</b>	E.coli



**Creative Enzymes**

*Diagnostic Enzymes*

## T4 DNA Polymerase

**10× Reaction Buffer** 500 mM NaCl, 100 mM Tris-HCl, 100 mM MgCl<sub>2</sub>, 1000 µg/mL Recombinant Albumin, (pH 7.9 at 25°C).

---

**Activity Definitions** 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

---