

T4 DNA Polymerase

Product Information

Cat#	DIA-585
Source	Escherichia coli
Description	<p>T4 DNA polymerase catalyzes DNA synthesis in the 5'→3' direction in the presence of template and primers. It possesses strong 3'→5' exonuclease activity, which is greater than that of DNA polymerase I, but lacks 5'→3' exonuclease activity.</p> <p>These properties make it suitable for applications such as end polishing and blunt-end formation in molecular biology workflows.</p>
Unit Definition	One unit is defined as the amount of enzyme required to incorporate 10 nmol of dNTP into acid-insoluble material within 30 minutes at 37 °C.
Storage	-20 °C
Buffer	10 mM Tris-HCl pH 7.4, 100 mM KCl, 0.1 mM EDTA, 1 mM DTT, 0.1% Triton X-100, 50% glycerol
Applications	Gap filling; removal of 3' overhangs or filling-in of 5' overhangs to generate blunt ends.
Product Overview	<p>Gap filling (without strand displacement activity).</p> <p>Removal of 3' overhangs or filling in of 5' overhangs to generate blunt ends.</p>
Package	<p>2000 U</p> <p>T4 DNA polymerase (3 U/μL): 667 μL</p> <p>10× Blue Buffer (10× Blue Buffer; 100 mM Tris-HCl pH 7.9 25 °C; 500 mM NaCl; 100 mM MgCl₂; 10 mM DTT): 2 mL</p>