

Datasheet for ABIN3188210

T4 DNA Polymerase

Overview

Quantity:	500 U
Application:	DNA Amplification (DNA Amp)

Product Details

Characteristics:	T4 DNA Polymerase catalyzes the 5'→3' <i>synthesis of DNA from a single stranded, primed DNA template. This high fidelity enzyme also has potent 3'→5' exonuclease activity but lacks 5'→3' exonuclease function. T4 DNA Polymerase is the ideal choice for creating blunt ended DNA by removing 3'-overhangs or 5'-overhang filling, and is also useful for second strand DNA synthesis in site-specific mutagenesis.</i>
Components:	Enzyme supplied with 10X Reaction Buffer
Unit Definition:	One unit is defined as the amount of T4 DNA Polymerase that catalyzes the incorporation of 10 nmol of dNTP into acid insoluble material in 30 minutes at 37°C using poly(dA-dT):poly(dA-dT) as a template:primer.

Application Details

Comment:	<ul style="list-style-type: none"> • Generates blunt end DNA by filling in 5'overhangs or/and removing 3'overhangs • High fidelity due to strong 3'→5' <i>exonuclease activity</i> • Synthesis of labeled DNA probes by the replacement reaction • Sitespecific mutagenesis via primer extension from oligonucleotides
----------	--

Restrictions:	For Research Use only
---------------	-----------------------

Handling

Concentration:	5 U/μL
Buffer:	100 mM KPO4 (pH 6.5), 1 mM DTT, and 50 % (v/v) Glycerol.
Storage:	-20 °C

Publications

Product cited in: Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)