



Product Insert

T4 DNA Polymerase

Research Use Only

Product:

T4 DNA Polymerase, supplied with enzyme, dilution (storage) buffer, and 10x reaction buffer

Catalogue No:

BIO-27034 250u
BIO-27035 500u

Description:

T4 DNA polymerase catalyses the synthesis of DNA in the 5'-3' direction in the presence of a template and primers. This enzyme has 3'-5' proofreading exonuclease activity and no 5'-3' exonuclease activity.

Storage buffer:

10mM Tris-HCl (pH 8.0)
100mM NaCl
2.5mM MgCl₂
2mM DTT
0.5mM EDTA
50% Glycerol

10 x Reaction buffer:

670mM Tris-HCl(pH 8.8)
67mM MgCl₂
10mM DTT
167mM (NH₄)₂SO₄
2mg/ml Bovine Serum Albumin

Batch details:

Batch No: See vial
Units per vial: See vial
Concentration: See vial

Unit definition:

One unit is defined as the amount of the enzyme that incorporates 10nmoles of dNTP into DE-81 absorbable form in 30 minutes at 37°C.

Storage temperature:

T4 DNA Polymerase can be stored at -20°C, in a constant temperature freezer for 12 months. Avoid repeated freeze/thaw cycles.

Quality control tests:

Specific activity, SDS-PAAGE.purity, endonuclease/nickase

Applications:

- In vitro mutagenesis
- Probe-labelling in replacement reaction
- 3' overhang removal to form blunt ends
- 5' overhang fill in to form blunt ends

Note: This product is supplied for use in primer extension reactions. Purchase of this product does not convey a licence to perform any patented process.

This product contains a declaration of analysis at the time of manufacture