

Products	Cat #	Pack Size
NeoTherm™ DNA Polymerase	GC-031-0250	250 u
NeoTherm™ DNA Polymerase	GC-031-0500	500 u
NeoTherm™ DNA Polymerase	GC-031-1000	1000 u
NeoTherm™ DNA Polymerase	GC-031-5000	5000 u

DESCRIPTION

NeoTherm™ DNA Polymerase is a thermostable DNA polymerase purified from the *Thermus aquaticus* strain. It is a **highly processive 5'-3' DNA polymerase lacking 3'-5'-exonuclease activity**. The enzyme is highly purified and is free of nonspecific endo- or exonucleases. This polymerase has a template-dependent activity which adds a single deoxyadenosine (A) to the 3' ends of PCR products (3'-A-overhangs). This property allows easy and efficient ligation of PCR products in TA cloning vectors.

APPLICATION

- PCR
- DNA labelling

CONCENTRATION

5 units/μl

UNIT DEFINITION

One unit is defined as the amount of enzyme that incorporates 10 nmoles of dNTPs into acid-insoluble form in 30 min at 72°C.

STORAGE BUFFER

20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.1 mM EDTA, 5 mM DTT, 50% glycerol, 1% Triton X-100

STORAGE TEMPERATURE

-20°C

10X REACTION BUFFER

160 mM (NH₄)₂SO₄, 670 mM Tris-HCl pH 8.8 (at 25°C), 15 mM MgCl₂, 0.1% Tween 20

The 10x reaction buffer (on request with or without MgCl₂) is delivered free of charge.

QUALITY CONTROL

The enzyme is also tested to verify that less than 10 copies of bacterial 16S ribosomal RNA gene sequences are present in a standard 2.5 unit aliquot.