

Products	Cat #	Pack Size
BioThermPlus™ DNA Polymerase	GC-061-0250	250 u
BioThermPlus™ DNA Polymerase	GC-061-0500	500 u
BioThermPlus™ DNA Polymerase	GC-061-1000	1000 u
BioThermPlus™ DNA Polymerase	GC-061-5000	5000 u

## DESCRIPTION

**BioThermPlus™ DNA Polymerase** is designed for maximum PCR success. It is a blend of BioTherm™ DNA Polymerase and AccuTherm™ DNA Polymerase which allows **amplification of longer templates with greater success** and higher yields than either enzyme component alone. Together with a optimized buffer BioThermPlus™ DNA Polymerase provides the highest success rate of any PCR enzyme or enzyme blend. The enzyme formulation produces high PCR product yield from a wide variety **of templates up to 10 kb**. It´s also provides superior sensitivity by amplifying samples where starting material is limited.

## CONCENTRATION

5 units/μl

## UNIT DEFINITION

One unit is defined as the amount of enzyme that incorporates 10 nmoles of dNTPs into acidinsoluble form in 30 minutes at 72°C under the assay conditions (25 mM TAPS (tris-(hydroxymethyl)-methyl-amino-pro-panesulfonic acid, sodium salt) pH 9.3 (at 25°C); 50 mM KCl; 2 mM MgCl<sub>2</sub>; 1 mM β-mercaptoethanol) and activated calf thymus DNA as substrate.

## STORAGE BUFFER

10 mM K-phosphate buffer pH 7.0, 100 mM NaCl, 0.5 mM EDTA, 1 mM DTT, 0.01% Tween 20, 50% glycerol(v/v)

## STORAGE TEMPERATURE

Store BioTherm™ DNA polymerase below 0°C, preferably at -20°C, in a constant temperature freezer.

## 10 x REACTION BUFER

160 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 670 mM Tris-HCl pH 8.8 (at 25°C), 15 mM MgCl<sub>2</sub>, 0.1% Tween 20

The 10x reaction buffer (on request with or without MgCl<sub>2</sub>) is delivered free of charge.

Cat. No. **GC-002-006** 1.5 ml 10x reaction buffer (contains 15 mM MgCl<sub>2</sub>)

Cat. No. **GC-002-007** 1.5 ml 10x reaction buffer without MgCl<sub>2</sub> plus 50 mM MgCl<sub>2</sub> separately