

## **BioThermDNAminus™ Taq DNA Polymerase**

<b>Products</b>	<b>Cat #</b>	<b>Pack Size</b>
<b>BioThermDNAminus™ Taq DNA Polymerase</b>	GC-064-0250	250 u
<b>BioThermDNAminus™ Taq DNA Polymerase</b>	GC-064-0500	500 u

### **DESCRIPTION**

**BioThermD-™** DNA polymerase is a special purified DNA polymerase without any traces of *E. coli* DNA. It is optimal for the **amplification** and **sequencing of 16S rRNA genes to identify bacteria**.

### **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 minutes at 72°C under the assay conditions (25 mM TAPS (tris-(hydroxy-methyl)-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 BioThermD-™ DNA polymerase below 0°C, preferably at -20°C, in a constant temperature freezer.

### **10X REACTION BUFFER**

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 react. buffer without MgCl<sub>2</sub> plus 50 mM MgCl<sub>2</sub> separately