

BioThermRed™ Taq DNA Polymerase

Products	Cat #	Pack Size
BioThermRed™ Taq DNA Polymerase	GC-021-0500	500 u
BioThermRed™ Taq DNA Polymerase	GC-021-1000	1000 u

DESCRIPTION

BioThermRed™ DNA polymerase is a mixture of BioTherm™ DNA polymerase and **red pigment** that works like BioTherm™. After addition of **BioThermRed™** a thin red layer on the bottom of the tube appears. So you have a **visible pipetting control**. Furthermore you can see, if your reaction is already mixed, when the color of your reaction becomes uniform.

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 MgCl₂, 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, 0.2% indicator red dye, 50% glycerol (v/v)

STORAGE TEMPERATURE

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

10X REACTION BUFFER

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

Cat. No. **GC-002-006** 1.5 ml 10x reaction buffer (contains 15 mM MgCl₂)

Cat. No. **GC-002-007** 1.5 ml 10x reaction buffer without MgCl₂ plus 50 mM MgCl₂ separately

ASSOCIATED ACTIVITIES

Endonuclease- and exonuclease activities were not detectable after 2 and 1 hours incubation, respectively, of 1 μg lambda DNA and 0.22 μg of EcoRI digested lambda DNA, respectively, at 72°C in the presence of 15-20 units of BioThermRed™ DNA Polymerase.