

DATA QUALITY SHEET



BioThermT™ Taq DNA Polymerase

FOR RESEARCH USE ONLY

Cat. GC-002-0100, GC-002-0250, GC-002-0500, GC-002-1000, GC-002-5000

DESCRIPTION	BioThermT™ is a modified BioTherm™ DNA Polymerase to facilitate incorporation of Biotin- and Digoxigenin-dUTP in DNA
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-(hydroxy-methyl)-methyl-amino-propanesulfonic acid, sodium salt) pH 9.3 (at 25°C), 50 mM KCl, 2 mM MgCl ₂ , 1 mM β-mercaptoethanol) and activated free of charge.
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)
REACTION BUFFER	Reaction buffer (10x): 160 mM (NH ₄) ₂ SO ₄ , 670 mM Tris-HCl (pH 8,8 at 25°C), 15 mM MgCl ₂ , 0,1% Tween-20.
STORAGE TEMPERATURE	Store BioThermT Polymerase below 0°C preferably at -20°C, in a constant temperature freezer.
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 BioThermT™ DNA Polymerase..
SHELF LIFE	2 years from date of receipt under proper storage conditions.
FUNCTIONAL ANALYSIS	Tested functionally in a unit activity test