

BioThermAB™ Hot Start Taq DNA Polymerase

Products	Cat #	Pack Size
BioThermAB™ Hot Start Taq DNA Polymerase	GC-008-0250	250 u
BioThermAB™ Hot Start Taq DNA Polymerase	GC-008-0500	500 u
BioThermAB™ Hot Start Taq DNA Polymerase	GC-008-1000	1000 u

DESCRIPTION

BioThermAB HotStart Taq DNA polymerase offers all the benefits of BioTherm DNA polymerase plus an antibody-based, built-in hot start. The **BioThermAB** polymerase mix contains **HotStart Taq Monoclonal Antibody**, which blocks polymerase activity prior to the onset of thermal cycling. This prevents primer-dimers and other artifacts resulting from low-level synthesis from nonspecifically primed sites. The antibodies are quickly inactivated (after cca 1 min) by the increased temperature of thermal cycling. **BioThermAB** polymerase requires **no prolonged heating or denaturing step** as do other hot-start methods, making BioThermAB polymerase more convenient and easy to use.

BioThermAB HotStart Taq DNA polymerase is **fully activated after 1 min at 95°C**.

APPLICATION

- **Hot-Start-PCR**
- **PCR with high specificity**

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 TEMPERATURE

-20°C

10 x REACTION BUFER

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

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

QUALITY CONTROL

Activity, SDS-PAGE purity, absence of endonucleases/nickases and exonucleases

STORAGE BUFFER

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