

**Features:**

Maximo Taq DNA Polymerase provides robust PCR performance in a wide range of PCR applications and different templates. Best value in terms of cost per unit.

**Applications:**

- Standard / General PCR - Multiplex PCR
- High-throughput PCR
- Primer extension

- Gene mutation
- T/A cloning

**Description:**

Maximo Taq DNA Polymerase is a thermostable DNA polymerase that possesses a 5' → 3' polymerase activity and a double-strand specific 5' → 3' exonuclease activity. The enzyme consists of a single polypeptide with a molecular weight of 94KD.

**Concentration:** 5 u/μl**Unit definition:**

One unit incorporates 10 nmol of deoxyribonucleotide into acid-precipitation material in 30min at 74 degree

**Storage Buffer:**

25mM Tris-HCl (pH8.0), 100mM KCl, 0.1mM EDTA, 1mM DTT, 50% Glycerol, 0.5% Nonident P40, 0.5% Tween 20

**Reaction Buffers supplied with the enzyme:**

**10X Buffer I:** 500mM KCl, 100mM Tris-HCl, pH 9.0, 1% Triton X-100, 15mM MgCl<sub>2</sub>

**10X Buffer II:** 500mM KCl, 100mM Tris-HCl, pH 9.0. 1% Triton X-100 **MgCl<sub>2</sub>:** 25 mM

**Quality control:**

- PCR with various templates – genomic DNA, Phage Lambda DNA - 3 kb DNA amplification from 50 ng DNA
- batch variation and level of bacterial DNA contamination

**Transportation:** on blue ice**Storage:** at -20°C for 24 months**Usage:****Components Volume per reation**

10X reaction buffer I or buffer II 5 μl

25 mM MgCl<sub>2</sub> 1.5 μl (if you use buffer II) dNTP-Mix (40mM) 1.0 μl

Up-stream primer (10 μM stock) 0,5-2,5 μl Down-stream primer (10μM stock) 0,5-2,5 μl Template DNA 0,1-15 ng/ml plasmid DNA

1-10 μg/ml genomic DNA

Maximo Taq DNA Polymerase (5 u/μl) 0.2 - 1.0 μl

Sterile dest. Water (molecular grade) up to 50 μl total reaction volume