OPTIMUS SMG TAQ DNA POLYMERASE

A heat-stable DNA polymerase with a molecular weight of 95kDa suitable for routine PCR applications, standard and high throughput testing, and screening. It has 5' to 3' exonuclease activity to leave 3' end overhang with adenine bases for direct cloning. Available in 500 units per transaction.

CAT No.: SBM1

Molecular Weight: 95kDa

Concentration: 5 units/µl

Application:

- Routine PCR
- Colony PCR
- Standard testing
- Screening
- High throughput testing

Transportation: Kept on blue ice

Content: 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 MgCl2
- 10X Buffer II**:** 500mM KCl, 100mM Tris-HCl, p H 9.0. 1% Triton X-100
- MgCl2: 25 mM

Usage:

- Components Volume per reaction:

- 10X reaction buffer I or buffer II 5 µl
- 25 mM MgCl2 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

Storage: Store at -20°C for 24 months

Quality Control:

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