

Taq Polymerase

Recombinant Taq polymerase from Axygen Bioscience is a genetically modified for enhanced activity and stability at ambient temperature. The Taq is supplied in a kit complete with 10X Standard Taq Buffers with and without and magnesium chloride in separate vials.

- **Highly pure Taq polymerase from a recombinant source.**
- **High activity for standard PCR applications; gives high yields.**
- **Stable at ambient temperature for a month.**
- **Supplied as a complete kit with 10X Reaction buffer with Mg⁺⁺, 10X buffer Mg⁺⁺ free buffer and MgCl₂**
- **Exceptional value compared to high price brands.**

Applications

- Polymerase Chain Reaction (PCR)
- High-Throughput PCR
- Primer Extension
- DHPLC
- Microarray Analysis

Reagents Supplied

- Standard Taq Polymerase -500 units.
- Taq Reaction Buffer -1ml
- Taq Reaction Buffer-Mg₂ Free -1ml
- Magnesium Chloride -1ml

Unit Definition

One unit is defined as the amount of enzyme that will incorporate 10 nmol of dNTP into acid-insoluble material in 30 minutes at 75°C.

Concentration: 5 Units per µL.

Long Term Storage Temperature: -20°C

Stable for one month at ambient temperature without significant loss of activity.

Storage Buffer: 20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.5% Tween 20, 0.1 mM EDTA, 1mM DTT, and 50% glycerol.

10X Taq Reaction Buffers: 500mM Tricine (pH 8.0), 120mM Potassium Acetate, 30mM Magnesium Sulphate, 0.1% Triton X-100; and 50µg/ml BSA (DNA and RNA free).

10X Taq Reaction Buffer Magnesium Free: Same as above but without Magnesium sulphate.

PCR Taq Master Mix: Premixed ready-to-use solution containing recombinant Taq with enhanced activity and temperature stability, dNTPs and buffers. Just add template primers and water and amplify.

Master Mix Composition:

- Taq DNA polymerase
- 5X Reaction Buffer containing 0.4 M Tris-HCl, 0.1 M (NH₄)₂SO₄, 0.1% w/v Tween-20
- 7.5 mM MgCl₂
- 1 mM dNTPs of each 200 µM dATP, 200 µM dCTP, 200 µM dGTP and 200 µM dTTP.

dNTP Mixture:

This ready-to-use mix consists of dATP, dCTP, dGTP and dTTP (each at a final concentration of 20 mM) in TE buffer, within one vial. The total concentration is 80 mM.

dNTP Set: Contains of 100 mM solutions of dATP, dCTP, dGTP and dTTP each in separate vials in TE buffer.

Ordering Information

Part#	Product Description	Qty
PCR-TAQ-R-5	Taq Polymerase	500 Units
PCR-TAQ-R-10	Taq Polymerase	1000 Units
PCR-TAQ-MX-1	Taq Master Mix -5X	1ml
PCR-DNTP-S-254	dNTPset (25umol/dNTP, 100mM)	25µmolX4
PCR-DNTP-M-100	dNTP mixture (80mM total conc. 20mM each dNTP)	100µl
PCR-DUTP-R-25	dUTP (25umol, 100mM)	25µmol
PCR-DUTP-R-251	dUTP (25umol, 100mM)	10X 25µmol

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