

Taq Master / high yield

Master mix of thermostable DNA polymerase

Ready-to-use mixes for PCR

| Cat.-No. | Amount | Size |
|----------|---------------|------|
| PCR-101S | 100 reactions | 1 ml |
| PCR-101L | 500 reactions | 5 ml |

For *in vitro* use only

Quality guaranteed for 12 months

Store at -20°C, avoid frequent thawing and freezing

Storage at 4°C for up to 3 months possible

Description

Taq Master / high yield contains all reagents required for PCR (except template and primer) in a premixed 5x concentrated ready-to-use solution.

The Master Mix is recommended for use in routine PCR reactions. It is optimized for high efficiency and gives superior amplification results in a broad range of reaction conditions with most primer-template pairs. Note that the mix is based on a detergent containing buffer system not recommended for plate based PCR and automated pipetting.

It catalyzes the polymerization of nucleotides into duplex DNA in 5'→3' direction in the presence of magnesium. It also possesses a 5'→3' polymerization-dependent exonuclease replacement activity but lacks a 3'→5' exonuclease activity.

Recommended PCR assay

| 50 µl PCR assay | | |
|------------------|----------------------------|-----------|
| 10 µl | 5x Taq Master Mix | red cap |
| 0.2-1 µM | each Primer | |
| 2-50 ng | Template DNA | |
| Fill up to 50 µl | PCR grade H ₂ O | white cap |

Recommended cycling conditions

| | | | |
|--------------------------|-----------|----------------|-----|
| Initial denaturation | 94°C | 2 min | 1x |
| Denaturation | 94°C | 30 sec | 30x |
| Annealing ¹⁾ | 45 - 68°C | 30 sec | |
| Elongation ²⁾ | 72°C | 30 sec - 3 min | |
| Final elongation | 72°C | 2 min | 1x |

- 1) The annealing temperature depends on the melting temperature of the primers used.
- 2) The elongation time depends on the length of the fragments to be amplified. A time of 1 min/kbp is recommended.

For optimal specificity and amplification an individual optimization of the recommended parameters may be necessary for each new primer-template pair.

5x Taq Master / high yield (red cap)

Thermostable DNA polymerase, dATP, dCTP, dGTP, dTTP, reaction buffer with (NH₄)₂SO₄, MgCl₂ and Triton X-100, stabilizers

PCR grade water (white cap)