

Taq Master

Master Mix of thermostable DNA polymerase

 Ready-to-use mixes for PCR

Cat.-No.	Amount	Size
PCR-102S	100 reactions	1 ml
PCR-102L	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 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 specificity and guarantees minimal by-product formation. The mix is particularly suitable for plate based PCR and automated pipetting where a detergent free buffer system is required.

The enzyme 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 - 4 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 template DNA and/or primer pair.

5x Taq Master (red cap)

Thermostable DNA polymerase, dATP, dCTP, dGTP, dTTP, reaction buffer with KCl and MgCl₂, stabilizers

PCR grade water (white cap)