



Red Load Taq Master (5x)

Master mix for direct gel loading

Cat. No.	Amount
PCR-108S	1 ml (5x conc.)
PCR-108L	5 x 1 ml (5x conc.)

For *in vitro* use only!

Shipping: shipped on blue ice

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Form: liquid

Concentration: 5x conc.

Description:

Red Load Taq Master contains an inherent red dye and allows the direct loading of the PCR reaction product onto the gel. It 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.

Content:

5x Red Load Taq Master (red cap)

master mix of thermostable DNA polymerase, dATP, dCTP, dGTP, dTTP, KCl, MgCl₂, red dye, gel loading buffer and stabilizers.

PCR grade water (white cap)

Recommended 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 Water	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	30x
Elongation ²⁾	72 °C	30 sec - 3 min	30x
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/kb 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.