

PCR Additives Kit

Stabilizer and enhancer

Supplements for PCR

Cat.-No.	Amount
PCR-252	500 reactions

For *in vitro* use only
 Quality guaranteed for 12 months
 Store at 2-8°C or -20°C

Description

PCR Additives Kit contains a stabilizer and enhancer bundle for the amplification of difficult templates such as GC-rich or extremely long fragments.

Stabilizer and enhancer

Taq-stabilizer

5-10% Taq-stabilizer in the PCR reaction is recommended to improve amplification efficiency and specificity. It stabilizes Taq polymerase and reduces secondary DNA structures. Note that higher concentrations may give conflicting results in multiplex reactions.

GC-enhancer

15-30% GC-enhancer in the PCR is recommended for amplifying GC-rich templates. It reduces the melting temperature of DNA. Thus, primer annealing temperature should be reduced by 1-2°C.

Recommended PCR assay

50 µl PCR assay	
5 µl	10x Reaction buffer
3 µl	MgCl ₂ stock solution, 25 mM
1 µl	dNTP mix, 10 mM
0.2-1 µM	each Primer
2-50 ng (0.4-10 fmol)	Template DNA
2.5-5 µl ¹⁾	Taq-stabilizer
7.5-15 µl ¹⁾	GC-enhancer
0.2-0.5 µl (1-2.5 U)	Polymerase (5 units/µl)
Fill up to 50 µl	PCR grade H ₂ O

Taq-stabilizer, 2x 1 ml

GC-enhancer, 4x 1.5 ml

1) For optimal amplification an individual optimization of the recommended amounts may be necessary for each new template DNA and/or primer pair.