

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 -20°C, avoid frequent thawing and freezing

Description

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

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.

Recommended 50 µl PCR assay			
component	stock conc.	final conc.	amount
Reaction Buffer complete	10x	1x	5 µl
Taq-stabilizer	100%	5-10%	2.5-5 µl ¹⁾
dNTP Mix	10 mM	200 µM	1 µl
Primer	10 µM each	200-400 µM	1-2 µl
Template DNA		up to 50 ng	
Taq Polymerase	5 units/µl	0.025 units/µl	0.25 µl (1.25 units)
PCR-grade water			fill up to 50 µl

GC-Enhancer

10-20% 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 50 µl PCR assay			
component	stock conc.	final conc.	amount
Reaction Buffer complete	10x	1x	5 µl
GC-Enhancer	100%	10-20%	5-10 µl ¹⁾
dNTP Mix	10 mM	200 µM	1 µl
Primer	10 µM each	200-400 µM	1-2 µl
Template DNA		up to 50 ng	
Taq Polymerase	5 units/µl	0.025 units/µl	0.25 µl (1.25 units)
PCR-grade water			fill up to 50 µl

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

Taq-Stabilizer, 2 x 1 ml

GC-Enhancer, 4 x 1 ml