



High Quality and Low Cost Life Science Reagents

AmpSure™ Gold DNA Polymerase

Cat. No.

H 8501 (250 units)

H 8502 (500 units)

H 8503 (2,000 units)

H 8504 (5,000 units)

H 8505 (10,000 units)

Conc: 5 U/μl

Store at -20°C (non-frost-free)

Description

AmpSure Gold™ DNA Polymerase is a thermostable, chemically modified form of recombinant Taq DNA polymerase. This enzyme delivers superior results due to its unique enzyme design and optimized buffer system (Fig.1 and Fig.2). AmpSure Gold™ DNA Polymerase is inactive at temperatures below 75°C, but is activated by a 15-minute incubation step at 95°C.

Kit Size

Component	250 U	500 U	2000 U	5000 U	10,000 U
AmpSure™ Gold DNA Polymerase	50 μl	100 μl	2x200 μl	5x200 μl	4x500 μl
10X PCR Buffer (No Mg ⁺⁺)	1ml	1ml	3x1.5ml	7x1.5ml	15x1.5ml
25 mM MgCl ₂	1ml	1ml	3x1.5ml	7x1.5ml	15x1.5ml

Storage Buffer

20 mM Tris-HCl (pH 8.0 @ 25°C), 0.1 mM EDTA, 1 mM DTT, 50% (v/v) glycerol, 1% (v/v) Triton X-100

10X PCR Buffer, No Mg⁺⁺

100mM Tris-HCl (pH 8.3 at 25°C), 500mM KCl

The PCR Buffer is supplied as a 10X concentrate and should be diluted for use.

Note: The optimal Mg⁺⁺ concentration should be determined empirically but in most cases a final concentration of 2 mM will produce satisfactory results.

Unit Definition

One unit incorporates 10 nmol of deoxyribonucleotide into acid-precipitable material in 30 minutes at 74°C.

Unit assay conditions: 25 mM TAPS (pH 9.3), 50 mM KCl, 2 mM MgCl₂, 1 mM DTT, 0.5 mg/ml activated salmon sperm DNA, 0.2 mM dATP, dCTP, dGTP, dTTP

Quality Control

This product has passed the following quality control assays: functional absence of double- and single-stranded endonuclease activity; >90% homogeneous by SDS gel electrophoresis; functional absence of contaminating 5'- and 3'-exonuclease activity.

Trademarks

AmpSure is trademark of RD Biosciences, Inc.

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