AMPLIQON
PCR ENZYMES & REAGENTS

- 20 °C

HL-ExoI

Concentration: 20 unit/µl

Cat. No.: A640107
5000 Units

A640107

MADE IN **DENMARK**

-	HL-ExoI 20 U/µl
ID No.	7200200
Cap colour	Blue
Content	1 x 0.25 ml

Key Features

- HL-ExoI exibits 3'-5' exonuclease activity
- Specific for single stranded DNA
- Active at temperatures ≥ 25 °C
- Specific activity ≥ 50 000 U/mg

Ampliqon HL-ExoI is recombinantly produced in an *E. coli* strain expressing the HL-ExoI gene originating from an Arctic marine bacterium. HL-ExoI exibits 3'-5' exonuclease activity, specific for single stranded DNA. HL-ExoI is active at temperatures ≥25°C, and inactivated by 1 min. incubation at 80°C, or 15 min. at 60°C. HL-ExoI is active under a wide variety of buffer conditions, allowing addition of the enzyme directly into most reaction mixes. HL-ExoI requires magnesium (optimal Mg^{2+} concentration is 10 mM) and the presence of a free 3'-hydroxyl terminus.

Components

Ampliqon HL-ExoI in storage buffer

- HL-ExoI 20 unit/µl, 10 mM Tris-HCl pH 7.5 at 25 °C, 200 mM NaCl, 10 mM $MgCl_2$, 1 mM DTT, 0.01% (v/v) Triton X-100, 50% (v/v) Glycerol.

Recommended Storage and Stability

Long term storage at -20 °C. Product expiry at -20 °C is stated on the label.

Unit Definition

One unit is defined as the amount of enzymes that releases 10 nmoles of acid soluble nucleotides in 30 min at 25 °C, using reaction buffer: 20 mM Tris-HCl pH 7.5 at 25°C, 200 mM NaCl, 20 mM $MgCl_2$, 1 mM DTT, 0.01% Triton X-100, 2.5% glycerol and ^{3}H-dATP-labelled DNA (25 ng/µl).

Optimal reaction conditions:

0-15 mM $MgCl_2$ and ≤100 mM NaCl, at 25-37 °C.

Quality Control

HL-ExoI is tested for RNase activity and double stranded and single stranded endonuclease activity. Furthermore, HL-ExoI is functionally tested (together with rSAP) by spiking a PCR product with dNTPs and primers followed by Sanger sequencing.

Applications

Removal of residual ssDNA and oligonucleotides: Linear ssDNA and oligonucleotides are selectively degraded from heterogeneous mixtures of nucleic acids in reaction mixes.

Related Products

HL-ExoI 20 units/µl	Cat. No.
• 500 Units	A640104

rSAP 1 units/µl	Cat. No.
• 150 Units	A650101
• 375 Units	A650103

PureIT ExoZAP PCR CleanUp Kit	Cat. No.
• 500 reactions	A630203
• 5000 reactions	A630207

PureIT ExoZAP PCR CleanUp	Cat. No.
• 500 reactions	A620603
• 5000 reactions	A620607

Taq Polymerase (500 units) *	Cat. No.
Taq DNA Polymerase 5 U/µl	A110003
• with 10x Ammonium Buffer	A111103
• with 5x PCR Buffer RED	A111803
Taq DNA Polymerase 5 U/µl, RED	A200003
• with 10x Ammonium Buffer	A201103
Taq DNA Polymerase 5 U/µl, glycerol free	A100003
• with 10x Ammonium Buffer	A101103

Hot Start Polymerase (500 units) *	Cat. No.
TEMPase Hot Start DNA Polymerase, 5 U/µl	A220003
• with 10x Ammonium Buffer	A221103
• 5x PCR Buffer RED	A221803
TEMPase Hot Start DNA Polymerase, glycerol free 5 U/µl	A240003
• with 10x Ammonium Buffer	A241103

*Available in kits including one or two buffers (Ammonium Buffer, Standard Buffer or Combination Buffer).

Buffers for DNA polymerases *	Cat. No.
10x Ammonium Buffer, 3 x 1.5 ml	A301103
10x Standard Buffer, 3 x 1.5 ml	A302103
10x Combination Buffer, 3 x 1.5 ml	A303103
5x PCR Buffer RED, 3 x 1,5 ml **	A301803

*Ammonium Buffer, Standard Buffer and Combination Buffer are also available as Mg^{2+} free buffers, detergent free buffers and Mg^{2+} and detergent free buffers. **For direct gel loading and visualisation.

Taq Master Mixes (500 x 50 µl reactions) *	Cat. No.
2x Master Mix, 1.5 mM $MgCl_2$ final concentration	A140303
2x OptiMix CLEAR, 1.5 mM $MgCl_2$ final concentration	A370503
2x Master Mix RED, 1.5 mM $MgCl_2$ final concentration	A180303

TEMPase Hot Start Master Mixes (500 x 50 µl reactions) *	Cat. No.
2x Master Mix A**, 1.5 mM $MgCl_2$ final concentration	A230303
2x Master Mix A**BLUE, 1.5 mM $MgCl_2$ final concentration	A290403

*Master mixes available also in 1.1x variants as well as 2 mM $MgCl_2$ variants, **Mix A is Ammonium Buffer based, also available as Mix C based on Combination Buffer.

Special Master Mixes (500 x 50 µl reactions)	Cat. No.
Multiplex 2x Master Mix, 3 mM $MgCl_2$ final concentration	A260303
GC TEMPase 2x Master Mix I – for GC-rich templates	A331703
GC TEMPase 2x Master Mix II – for GC-rich templates	A332703

Real-time PCR Master Mixes (400 x 25 µl reactions)	Cat. No.
RealQ Plus 2x Master Mix for probe,	
• without ROX™	A313402
• with low ROX™	A314402
• with high ROX™	A315402
RealQ Plus 2x Master Mix Green	
• without ROX™	A323402
• with low ROX™	A324402
• with high ROX™	A325402

Reagents for *in vitro* laboratory use only.

Other product sizes, combinations and customized solutions are available. Please look at www.ampliqon.com or ask for our complete product list for PCR Enzymes. For customized solutions please contact us.

Made in Denmark
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