

HL-Exol

Heat-Labile Exonuclease I (HL-Exol) is a 3' – 5' exonuclease, specific for single stranded DNA. The enzyme is recombinantly produced in *E. coli*. HL-Exol is active at 25 – 37°C and inactivated by 1 minute incubation at 80°C or 15 minutes at 60°C.

HL-Exol is used for degradation of ssDNA such as primers and oligos. It is also ideal for treatment of sensitive samples and useful in the development of novel molecular diagnostics applications.

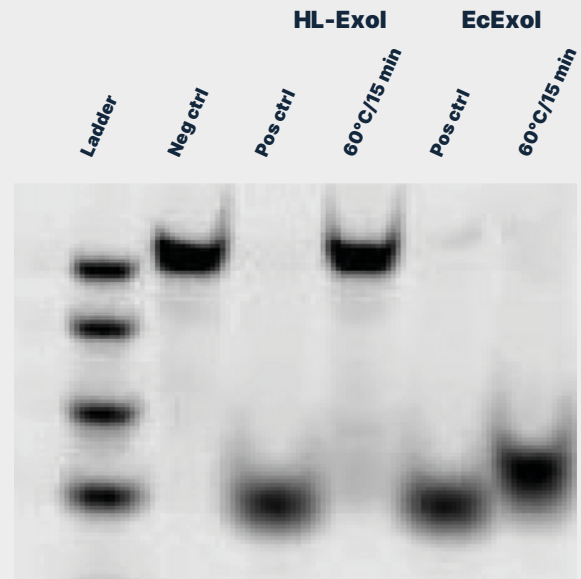


Fig 1. Inactivation of HL-Exol

Comparison of inactivation properties of HL-Exol and a commercial *E. coli* Exol (EcExol). After incubation for 10 min the nucleases were inactivated at 60°C for 15 min. The samples were then labelled with a 20-mer FAM and incubated for 30 min before visualization on a urea-PAGE gel.

Specifications

Optimal reaction conditions	0 – 15 mM MgCl ₂ and ≤100 mM NaCl at 25 – 37°C.
Storage buffer	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
Stability	The enzyme is stable at -20°C for >3 years in the supplied storage buffer. The enzyme tolerates a minimum of five freeze-thaw cycles (-80°C) without loss of activity

Specifications

dsDNA endonuclease activity	200 U HL-Exol was incubated with a supercoiled plasmid (1 µg) for 4 hours at 37°C. Agarose gel electrophoresis did not reveal any transformation of closed circular DNA to nicked DNA.
ssDNA endonuclease activity	100 U HL-Exol was incubated with M13 ssDNA (0.5 µg) for 4 hours at 37°C. Agarose gel electrophoresis did not reveal any visible signs of ssDNA degradation.

Ordering information

	Article no.	Pack Size*	Concentration
HL-Exol	70100-201	2500 U	20 - 25 U/μl
	70100-150	50 kU	> 200 U/ml
	70100-100	Custom	> 200 U/ml

* One unit catalyses the release of 10 nmol of acid soluble nucleotides in 30 min at 25°C. Reaction buffer: 20 mM Tris-HCl pH 7.5 at 25°C, 200 mM NaCl, 20 mM MgCl₂, 1 mM DTT, 0.01% Triton X-100, 2.5% Glycerol and 3H-dATP-labelled DNA (25 ng/μl).



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Quality

ArcticZymes is dedicated to the quality of our products and certified according to ISO 13485:2016. ArcticZymes offers the convenience of providing standard bulk enzymes as off the shelf products. In addition, ArcticZymes offers enzymes in customized formats. For additional information, please contact us.

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Additional Information

We are pleased to provide data and information relating to HL-Exol. Available data includes stability, buffer storage conditions, pH, specific activity data. For more information, please check our website www.arcticzymes.com.

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