



EliZyme™

ELIZYME HIFI

Advantages

- Higher fidelity
- Proofreading activity
- Increased PCR success rates
- Higher yields

Applications

- High fidelity PCR
- Standard and fast PCR
- Efficient and specific amplification from complex templates including GC-rich and AT-rich sequences
- Sanger sequencing

Availability

- Polymerase with buffer
- Buffer includes dNTPs, MgCl₂ and enhancers (additional MgCl₂ is not necessary; the buffer composition has been optimised to maximise PCR success rates)



ELIZYME HIFI

EliZyme HIFI is characterised by its 3'-5' exonuclease (proofreading) activity in PCR. Significantly improved performance is attributed to several point-mutations improving the performance compared with its native form.

EliZyme HIFI is a robust enzyme system suited for routine PCR, DNA amplification for Sanger sequencing and other genotyping applications. The enzyme system is characterised by enhanced PCR speed, yield and specificity. **EliZyme HIFI** delivers exceptional PCR performance on complex templates including GC-rich and AT-rich sequences. The error rate of **EliZyme HIFI** is lower than Taq DNA polymerase (1 error per 4.5×10^7 nucleotides incorporated).



Figure A

Amplification of a 4.8 kb fragment of GAPDH from human genomic DNA. A 2 fold dilution series of template starting from 100 ng was used. Cycling conditions: initial denaturation at 95 °C for 1 minute, 25 cycles of denaturation at 95 °C for 30 seconds, annealing at 60 °C for 30 seconds and extension at 72 °C for 75 seconds. **EliZyme HIFI** is able to amplify lower concentration DNA template compared with competitors "B" and "C".

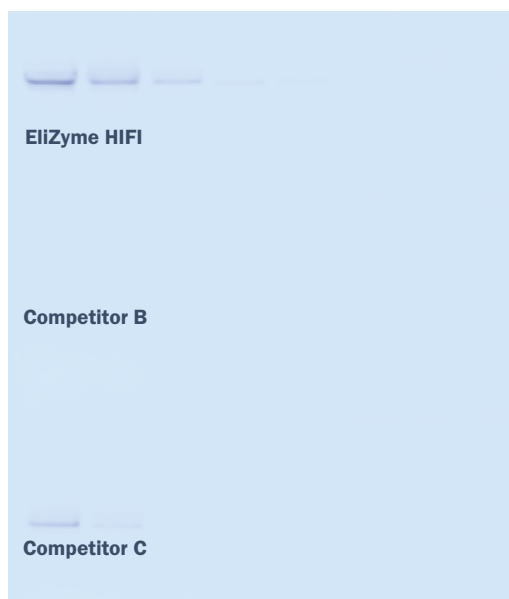


Figure B

Amplification of 60 % GC 1.1 kb fragment of GAPDH from human genomic DNA. A 2 fold dilution series of template starting from 100 ng was used. **EliZyme HIFI** is able to amplify DNA with higher GC content compared with competitors "B" and "C".

AVAILABLE KITS

	Ref. No.	Content	Pack Size
EliZyme HIFI	EZ2102	1x0,1 ml 2 U/μl + 3x1 ml buffer	200 U
	EZ2110	4x0,125 ml 2 U/μl + 2x7,5 ml buffer	1000 U