

AQ97 HIGH FIDELITY DNA POLYMERASE 2x MASTER MIX

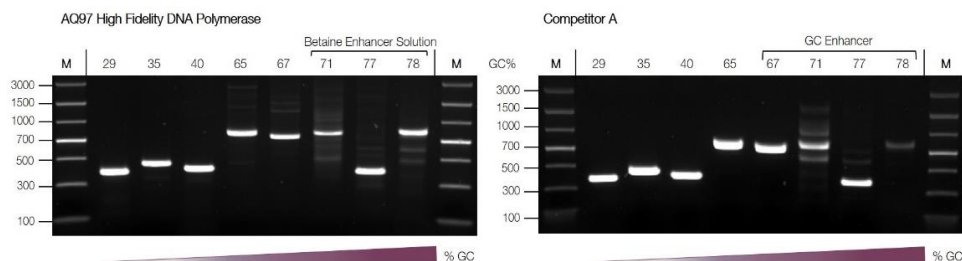


AQ97 High Fidelity DNA Polymerase 2x Master Mix

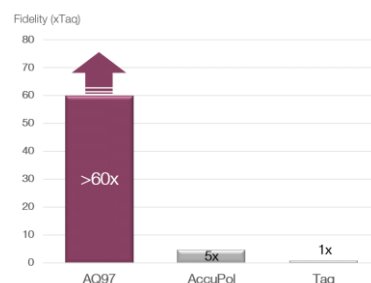
- All-in-one 2x master mix for great convenience
- High Fidelity: > 60x *Taq* DNA Polymerase
- High elongation rate: 10 sec/kb
- 3' → 5' proofreading exonuclease activity.
- Good coverage on difficult DNA templates with low to high GC content
- Long range capability: 11 kb for gDNA

The AQ97 master mix performs robust amplification of a vast range of difficult targets, including those up to 11 kb and with high to low GC content. The fidelity of the polymerase is more than 60x *Taq* DNA Polymerase. This master mix is recommended for cloning, mutagenesis and NGS applications.

Robust Amplification



Fidelity Study



Performance of AQ97 High Fidelity DNA Polymerase was compared to a leading high fidelity DNA polymerase (Competitor A). Eight different human genomic DNA targets, 400 – 800 bp in length and with GC content ranging from 29 – 78 %, were amplified. Robust amplification was observed using AQ97 High Fidelity DNA Polymerase on the eight human genomic targets. High fidelity DNA polymerase from Competitor A provides robust amplification on all DNA targets except the one with the highest GC content. Amplification studies have been set up, as recommended by the manufacturers. When amplifying GC-rich targets, 2 M Betaine Enhancer Solution (AQ97 DNA Polymerase) or GC enhancer (High fidelity DNA polymerase Competitor A) were included in the reaction mix.

Fidelity values of AQ97 High Fidelity DNA Polymerase, AccuPol DNA Polymerase and *Taq* DNA Polymerase were measured using a novel NGS-based technology. Due to method limitations it was not possible to estimate more than up to a 60-fold *Taq* fidelity.

	Size*	Content	Cat #
AQ97 High Fidelity DNA Polymerase 2x Master Mix 1.5 mM MgCl ₂ final	100 Reactions	2 x 1.25 ml	A770101
	500 Reactions	10 x 1.25 ml	A770103
	2500 Reactions	50 x 1.25 ml	A770106
	5000 Reactions	25 x 5 ml	A770107
AQ97 High Fidelity DNA Polymerase 2 U/μl With 5x AQ97 Buffer and MgCl ₂	100 Units	1 x 50 μl	A767501
	500 Units	1 x 250 μl	A767503
	1000 Units	2 x 250 μl	A767504
	2500 Units	5 x 250 μl	A767506
Betaine Enhancer Solution 5 M		5 x 1 ml	A351104

* AQ97 High Fidelity DNA Polymerase – reaction size is 25 μl (0.5 unit/reaction)
AQ97 High Fidelity DNA Polymerase 2x Master Mix – reaction size is 50 μl