

AQ90 HIGH FIDELITY DNA POLYMERASE

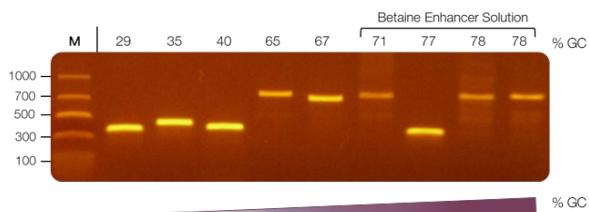


AQ90 High Fidelity DNA Polymerase

- High Fidelity – measured up to 50x *Taq* DNA Polymerase
- Robust and reliable amplification
- 3' → 5' proofreading exonuclease activity.
- Good coverage on difficult DNA templates with low to high GC content
- Long range capability: 8.5 kb for gDNA and ≤ 12.5 kb for λDNA

AQ90 High Fidelity DNA Polymerase is a proofreading DNA polymerase with the ability to perform robust amplification of a vast range of difficult targets, including those up to 12.5 kb and with high to low GC content. The fidelity of the polymerase has been measured up to 50x *Taq* DNA Polymerase. This polymerase is highly recommended for cloning, mutagenesis and NGS applications.

Robust Amplification



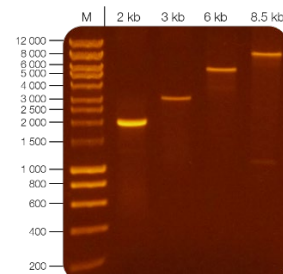
Robust amplification is observed using AQ90 High Fidelity DNA Polymerase nine human genomic DNA targets with low to high GC content. Amplification of the targets 71 – 78% GC was only successful when Betaine Enhancer Solution was added to the master mix.

AQ90 High Fidelity DNA Polymerase



Inspiration for the name of the AQ90 High Fidelity DNA polymerase was taken from several places: its key features (Accuracy), its manufacturer (Ampliqon) and lastly from the molecular weight of the enzyme (90 kDa).

Long Range



Amplification of long DNA targets. Four different targets of human genomic DNA ranging from 2 kb and up to 8.5 kb was used for this study.

	Size Reaction size: 25 µl*	Content	Cat #
AQ90 High Fidelity DNA Polymerase 2 U/µl	100 Units	1 x 50 µl	A457401
	500 Units	1 x 250 µl	A457403
With 10x AQ90 Buffer and MgCl ₂	1000 Units	2 x 250 µl	A457404
	2500 Units	5 x 250 µl	A457406
Betaine Enhancer Solution 5 M		5 x 1 ml	A351104

* 0.5 unit / 25 µl reaction size