



Smooth Path to End-point PCR Success

QIAamplifier[®] 96 thermal cyclers to boost your end-point PCR workflow



Fast cycling protocol, down to 45 minutes for 30 cycles



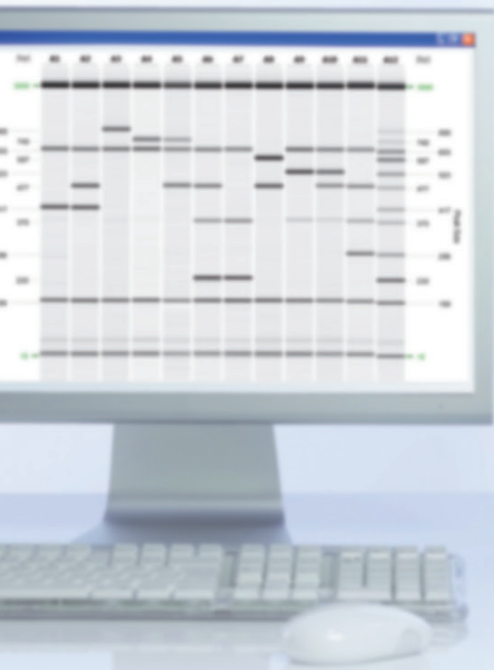
Linear gradient function for assay optimization



Accurate block control and temperature uniformity



7-inch color touchscreen and an easy-to-use software interface



Despite recent improvements in PCR technologies, researchers still face challenges such as nonspecific amplification, low yields and smearing, especially when dealing with difficult templates or low template amounts. This leads to an increased need for optimization of PCR parameters, such as cycling conditions and reagent concentrations. Do you need peace of mind to deliver consistent end-point PCR results in all conditions, even the most challenging? Simplicity of approach, high performance and accurate temperature control are driving increased use of block-based end-point PCR cyclers for routine gene amplification needs.

One system to satisfy all

Greater speed and superior temperature uniformity

Protocol run times

30 cycles in 45 minutes

Ramping rates

4°C/second heating

3.3°C/second cooling

Uniformity

±0.2°C at 55°C after 15s

The QIAamplifier 96 controls the sample block temperature without under- or overshooting the programmed target temperature. The innovative temperature control system achieves outstanding accuracy and maximizes experimental reproducibility.

Robust design and an easy-to-use interface make the QIAamplifier 96 a high-performance solution to meet all the demands of a busy lab. The 96-well block with gradient function is ideally suited for most end-point PCR applications in molecular biology, including genotyping, target detection, semi-quantitative gene expression, reverse transcription and multiplex analysis.

end-point PCR applications

Fast and accurate sample block technology

Block temperature range from

4°C to 99°C

Motorized heated lid applies even pressure with temperature control from

30°C to 110°C

An integrated slip clutch in the heated lid of the QIAamplifier 96 thermal cycler always maintains constant contact pressure, regardless of shape and height of the plasticware. This optimizes the contact between the sample block well and the walls of the plasticware, resulting in reproducible conditions.

Precise linear gradient function

- Optimize assays with easy determination of the optimal temperature for primer annealing
- Program the desired temperature increment for the gradient after entry of an annealing temperature for the block
- Set temperature levels with the Linear Gradient Tool (LGT)

Control accuracy

±0.1°C

Gradient range

20°C to 99°C

Maximum gradient of

20°C in 0.1°C increments

Robust design delivers reproducible results run after run

High expectations for long-term reliability and robustness are met with the well-thought-out design

High-performance smart heated lid

A rubber seal in the lid increases sample block temperature uniformity and prevents condensation.



7-inch color touchscreen

The QIAamplifier 96 is a stand-alone end-point PCR cycler with an easy-to-use software interface.



Whisper quiet

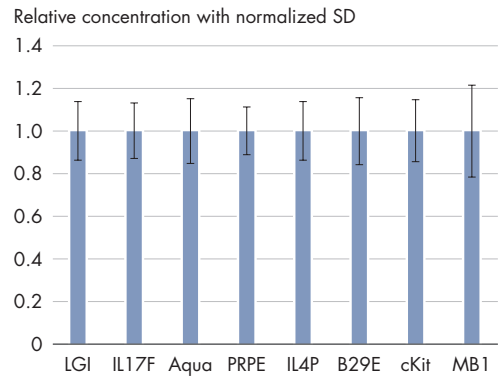
The airflow is optimized to keep the maximum noise level down to an extremely low 45 decibels.

Exceptional uniformity

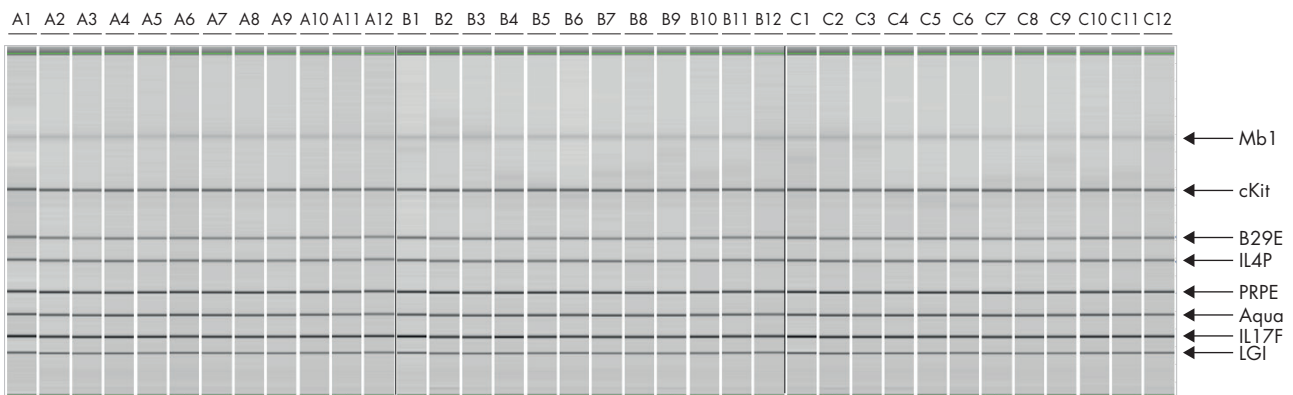
(A)

Target	Average concentration (ng/μl)	SD
LGI	1.26	0.17
IL17F	3.00	0.39
Aqua	1.67	0.25
PRPE	2.10	0.23
IL4P	0.97	0.13
B29E	0.75	0.12
cKit	1.16	0.17
MB1	0.21	0.04

(B)



(C)



Multiplex co-amplification and detection of 8 targets ranging from 123 bp to 610 bp using QIAGEN UCP Multiplex PCR Kit. 96 multiplex PCR reactions were setup according to kit's recommendation in a 96-well plate on the QIAamplifier 96. **A** Average concentration and standard deviation of the 8 targets. **B** Normalized concentration of targets with standard deviation. **C** Gel views of samples rows A, B and C using the QIAxcel DNA High Resolution Kit on the QIAxcel Advanced capillary electrophoresis instrument.

The QIAamplifier 96 delivers exceptional uniformity consistently, run after run, for best-in-class end-point PCR results by combining smart-lid technology with high-performance thermal elements in a fast and accurate thermoblock.



Easy to integrate

The QIAamplifier 96 enables fast end-point PCR in tubes, strips and 96-well plate format. The SBS sample block accommodates most tubes, strips and low-/normal-profile plates. It integrates easily in any new or existing PCR workflow.

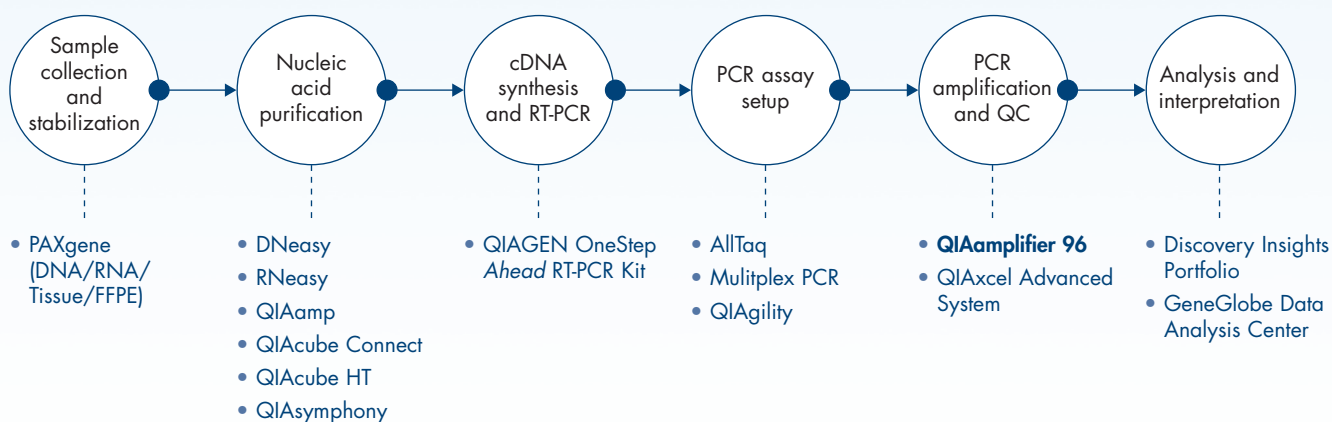
Easy to operate

The QIAamplifier 96 Software is optimized for fast setup of PCR protocols and includes several features for easy programming and intuitive handling:

- Pre-installed program templates can be directly used or easily adapted
- Multi-step programming allows to quickly edit all parameters for every program step within a single screen
- Direct spreadsheet and graphical programming parameters displayed on a single screen

Versatile instrument for all applications

The QIAamplifier 96 is an open system and can be used in combination with any compatible PCR kit.



Ensure a smooth path to PCR success by combining our top-notch end-point PCR kits with the new QIAamplifier 96 thermocycler.

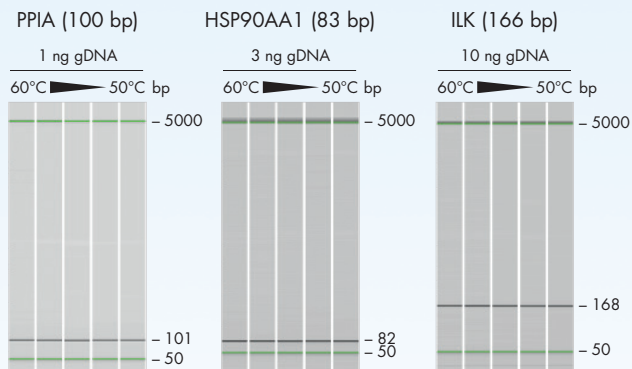
- Hassle- and optimization-free PCR with the AllTaq™ Master Mix and PCR Core Kits
- High-level multiplexing when combined with the UCP Multiplex PCR Kits
- Faster one-step RT-PCR with high sensitivity, specificity and fidelity using the QIAGEN One-Step Ahead RT-PCR Kit

Visit www.qiagen.com/qiaamplifier-96 for more information.

One master mix to Taq them all

The AllTaq PCR kit is optimized for ultrafast amplification of any target and works just as well for routine amplification as for challenging, long or high G-C content templates.

One protocol for all targets, streamlining workflows to just 45 minutes while enabling duplex PCR and amplification of GC-rich or long targets up to 9 kb. Guard-protected and hot-start chemistry provides superior specificity, sensitivity and outstanding room temperature stability while visual pipetting control monitor successful procedure.



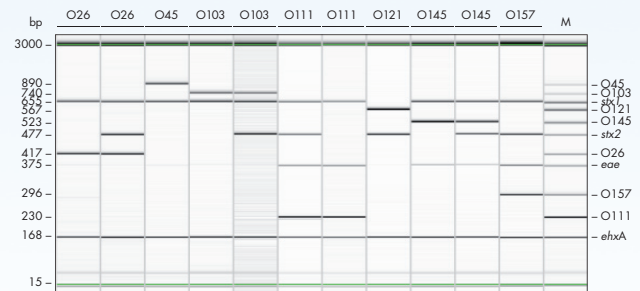
No optimization of annealing temperature required. PCR reactions were run using the AllTaq Master Mix Kit with different targets; varying template amount and annealing temperature (from 50°C to 60°C). Analysis was performed on the QIAxcel. All reactions resulted in successful and specific amplification of all targets.

The power of multiplexing

Amplify all your targets in a single tube to save time, money and DNA template without the need for protocol optimization.

The QIAGEN Multiplex PCR Kit outperforms kits tested from other suppliers and ensures efficient and specific simultaneous extension of all targets in the reaction for 5-plex, 10-plex, 15-plex, or more.

The QIAGEN Multiplex PCR Master Mix includes HotStarTaq DNA Polymerase and a unique PCR buffer containing the novel synthetic Factor MP. Together with optimized salt concentrations, this additive stabilizes specifically bound primers and enables efficient extension of all primers in the reaction without the need for optimization. Q-Solution, a novel additive that enables efficient amplification of "difficult" (e.g., GC-rich) templates, is also supplied.



QIAxcel Advanced analysis of 11 isolates tested with 11-gene multiplex PCR. The PCR included the major *E. coli* virulence genes *stx1*, *stx2*, *eae* and *ehxA*, along with *E. coli* O-antigens from O26, O45, O103, O111, O121, O145 and O157 serogroups. Lane A12 contains a DNA ladder. Amplicon sizes were verified by sequencing.

Embrace the future of electrophoresis with QIAxcel Advanced



Analysis of 12 samples in as little as three minutes



Unattended analysis of up to 96 samples



Resolution down to 3–5 bp for fragments <500 bp



Reliable detection with sensitivity down to 0.1 ng/μl



Automated sample loading limits error-prone manual steps



Standardization of analysis with predefined protocols



Reusable cartridges have optimized cost-efficiency



Advanced sample analysis with state-of-the-art software

Additional technical specifications

QIAamplifier 96	
Catalog number	QIAamplifier 96, 115 V: 9002990; QIAamplifier 96, 230 V: 9002991
Capacity	96 x 0.2 ml tubes, 96 well micro plates or 8 well strips
Block material	Aluminum
Block coating	Special alloy
Avg. heating rate	3.7°C/sec
Avg. cooling rate	3.0°C/sec
Max./min gradient	20°C/0.1°C
Temperature uniformity	95°C: +/- 0.6°C after 15 s; 72°C: +/- 0.3°C after 15 s; 55°C: +/- 0.2°C after 15 s
Software	User-specific quick start option for the five most recent programs; program preview before start; option for toggling between programming table and graph programming mode; Linear Gradient Tool, service info file (SINF) generation; expanded self-test; adjustable ramp rates; gradient temperature diagram view
Program memory	Total capacity of 350 programs in up to 90 user directories
Language	English
Automatic restart after power failure	Yes
HPSL technology	Yes
Power consumption	550 watt
Operating voltage	115, 230 Volt, 50/60 Hz
Interfaces	USB A
Environmental conditions	15°C to 35°C, 70 % air humidity, max. 2,000 m above sea level
Dimensions (WxDxH)	260 mm x 430 mm x 210 mm
Dimensions (WxDxH) with open lid	260 mm x 430 mm x 385 mm
Weight	11.5 kg



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