

**Amplification:
Conventional PCR**

*Amplify Your Expectations With Bio-Rad's
Full Range of PCR Solutions*

BIO-RAD

MyCycler™ Personality

- Intuitive interface
- Sleek, space-saving design
- 96-well x 0.2 ml format
- Thermal gradient option



iCycler® Flexibility

- Interchangeable reaction modules (96-, 60-, 384-, and dual 48-well)
- Upgradable to real-time PCR (96-well)
- Innovative gradient design (96-well)



Amplification Tools

- Hot-start iTaq™ DNA polymerase
- iScript™ cDNA synthesis kit
- dNTP mix
- Tubes and plates



The Integrated PCR System Solution



iCycler[®] Thermal Cycler



A Powerful Generation

The iCycler system redefines the standard for laboratory thermal cyclers. Today's laboratory requires instruments that provide intuitive programming, a small footprint, flexible assay formats, and high throughput — all at a reasonable price. With the flexibility to expand to real-time PCR applications, the iCycler thermal cycler satisfies even the most demanding laboratory requirements.

The Easiest-to-Use Instrument in Your Laboratory

The iCycler is an instrument you will start using without spending hours studying the manual. Its many user-friendly features will guide you from start to finish.

Intuitive User Interface

- Large 5.7" VGA screen with both graphic and text descriptions
- Alphanumeric entry for protocol and file names
- User-specific profiles and protocol folders organize assays for multiple applications or large laboratories
- Run completion summary reports and detailed validation reports confirm instrument performance
- Help screens and reference lists for specific PCR applications

Multiply Your Options

- Multiple temperature control methods for increased assay flexibility
- Direct upgrade path to convert your thermal cycler into a real-time PCR system
- Interchangeable reaction modules for extensive application flexibility

Multiple Reaction Modules Available



96 x 0.2 ml



60 x 0.5 ml



384-well



2 x 48 x 0.2 ml

MyCycler™ Thermal Cycler



Designed by Scientists for Scientists

Now you can have your own personal cycler without compromising performance. With its sleek design, 96-well format, and advanced specifications, the MyCycler is the personal cycler of choice.



Advanced Design

The sleek lines and inviting user interface might be what you notice first, but the MyCycler is designed for performance. With benchspace and time at a premium, its small footprint is the preferred choice for maximum throughput.

- Stylish, compact design optimizes available benchspace
- 96-well x 0.2 ml block with heated lid accommodates tubes, strips, and plates
- Innovative gradient design (optional)
- Temperature control by instrument algorithm or sample block measurement

Effortless Programming

An intuitive interface makes it easy to program the MyCycler. A high-resolution 4.7" screen presents a set of useful graphics and instinctive options to help you personalize your thermal cycling conditions.

- Graphic display of protocols
- Onboard help topics and reference list for specific PCR applications
- Trouble-free programming that is easy to learn
- Onscreen display of gradient temperature
- Auto-conversion of gradient protocols ensures consistent use of optimal thermal cycling conditions

Feature Comparison

	MyCycler Thermal Cycler	iCycler Thermal Cycler
Heating rate	2.5°C/sec	3.0°C/sec
Cooling rate	1.5°C/sec	2.0°C/sec
Communications	USB	Serial/RS-232
Accuracy	±0.5°C	±0.3°C
Uniformity	±0.5°C	±0.4°C
Sample block capacity	96 x 0.2 ml (see above)	Multiple formats
Real-time upgrade	No	Yes
Display screen	4.7" high-resolution	5.7" 1/4 VGA
Temperature gradient	Optional	Standard (96-well)

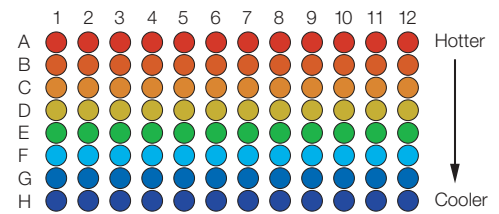
Optimization Essentials

Powerful Tools for Superior Performance in PCR

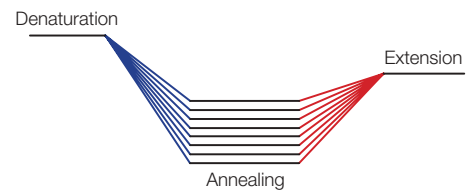
Advanced Thermal Gradient Design

The innovative vertical gradient design of the iCycler 96-well block and the MyCycler gradient upgrade gives maximum control over the number of parameters you can optimize.

- Optimize from 1 to 12 reaction components per experiment
- Easy programming with onscreen viewing of gradient temperature set points
- Program the gradient to vary from 1–25°C at any reaction temperature between 40°C and 90°C
- Multizone control for uniformity and reproducibility
- Precision ramping so each gradient set point is reached at the same time



Thermal gradient profile



Precision ramping

High-Quality Reagents for PCR

With Bio-Rad amplification reagents, you are assured of outstanding quality, enabling you to achieve success in all your PCR applications with minimal optimization.

- iScript cDNA synthesis kit
- iTaq DNA polymerase for robust amplification
- Advanced dNTP mix
- Supermix formats available for convenient assay setup

Unbiased Transcript Representation in RT-PCR

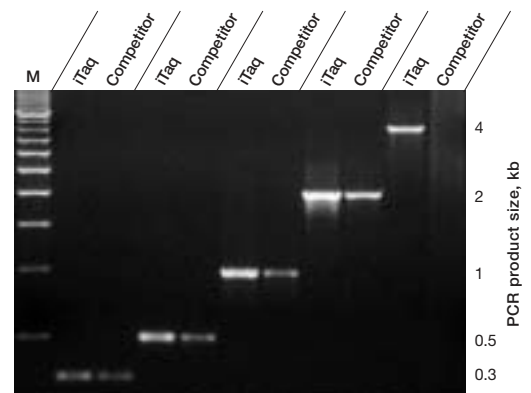
The iScript cDNA synthesis kit is an easy-to-use system for first-strand cDNA synthesis. All components are optimized to yield sensitive, unbiased transcript representation in RT-PCR. With the iScript cDNA synthesis kit, great results have never been easier.

- Premixed RNase inhibitor prevents degradation of RNA template
- RNase H⁺ iScript enzyme increases sensitivity
- Unique blend of oligo(dT) and random primers improves dynamic range
- Streamlined kit format requires minimal setup and reaction time

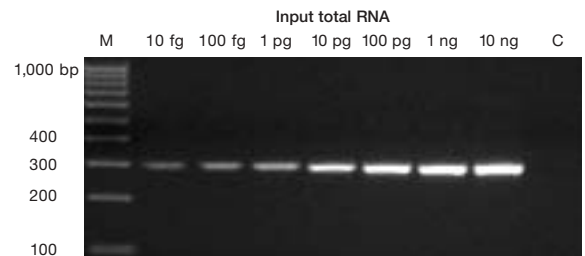
PCR Tubes and Plates

Bio-Rad's thin-wall tubes and plates are specifically designed for PCR applications. Choose from different configurations, such as tubes, strips, or plates, to best fit your needs.

- Uniform thin walls allows optimal heat transfer to PCR samples
- Certified DNase- and RNase-free reaction vessels
- Prescored plates for easy separation
- Caps and tubes available in 8- and 12-strip formats



iTaq antibody-mediated hot-start DNA polymerase outperforms a leading chemically modified hot-start DNA polymerase over a broad range of targets. Human genomic DNA fragments from 300 bp to 4 kb were amplified with iTaq DNA polymerase or a competitor's DNA polymerase according to the manufacturer's recommended protocol. Lane M: EZ Load™ 500 bp molecular ruler.



Sensitivity of the iScript cDNA synthesis kit in RT-PCR using low amounts of input RNA. cDNA was synthesized at 42°C and amplified with iTaq DNA polymerase using β -actin primers. Lane M, EZ Load 100 bp molecular ruler; lane C, no-template negative control.

Ordering Information

Catalog # Description

iCycler Thermal Cyclers

170-8720	iCycler Thermal Cycler With 96 x 0.2 ml Reaction Module
170-8722	iCycler Thermal Cycler With 2 x 48 x 0.2 ml Reaction Module
170-8724	iCycler Thermal Cycler With 60 x 0.5 ml Reaction Module
170-8726	iCycler Thermal Cycler With 384-Well Reaction Module

Each system includes an iCycler base with the specified reaction module, PCR tubes, power cord, quick reference card, instructions. 170-8720 and 170-8724 also include an in-sample temperature probe.

iCycler Reaction Modules

170-8703	iCycler 96 x 0.2 ml Reaction Module
170-8705	iCycler 2 x 48 x 0.2 ml Reaction Module
170-8707	iCycler 60 x 0.5 ml Reaction Module
170-8709	iCycler 384-Well Reaction Module

MyCycler Thermal Cycler

170-9703	MyCycler System, includes MyCycler thermal cycler, PCR tubes, iTaq DNA polymerase, power cord, quick reference guide, instructions
170-9705	MyCycler Firmware Upgrade Kit, includes USB cable, current operating firmware, installation instructions
170-9707	MyCycler Gradient Upgrade Kit, includes USB cable, USB hub, current operating firmware, USB dongle activation key, installation instructions
170-9709	MyCycler Sample Loading Trays, 2

Reagents

170-8870	iTaq DNA Polymerase, 5 U/μl, includes 250 U polymerase, 1.25 ml 10x PCR buffer, 1.25 ml 50 mM MgCl ₂ solution
170-8872	MgCl ₂ Solution, 50 mM, 1.25 ml
170-8874	dNTP Mix, 200 μl premixed solution, contains 10 mM each dNTP (dATP, dCTP, dGTP, dTTP)
170-8890	iScript cDNA Synthesis Kit, 25 x 20 μl reactions
170-8891	iScript cDNA Synthesis Kit, 100 x 20 μl reactions

Related Products

223-9473	0.2 ml Thin-Wall PCR Tubes, 1,000
223-9469	0.2 ml Thin-Wall PCR 8-Tube Strips, 120
223-9472	0.2 ml Thin-Wall PCR 8-Cap Strips, 120
223-9476	0.2 ml Thin-Wall PCR 12-Tube Strips, 80
223-9477	0.2 ml Thin-Wall PCR 12-Cap Strips, 80
223-9466	0.6 ml Thin-Wall PCR Tubes, 1,000
223-9495	384-Well PCR Plates, 25
223-9441	96-Well 0.2 ml Thin-Wall PCR Plates, 25
223-9444	Optical-Quality Sealing Tape, 100 sheets

For more information, contact your local Bio-Rad representative or visit us on the Web at www.bio-rad.com/amplification/

Practice of the patented polymerase chain reaction (PCR) process requires a license. The iCycler and MyCycler thermal cyclers and the iCycler iQ and MyiQ systems include an Authorized Thermal Cycler and may be used with PCR licenses available from Applied Biosystems. Their use with Authorized Reagents also provides a limited PCR license in accordance with the label rights accompanying such reagents. Some applications may also require licenses from other third parties.

SYBR is a trademark of Molecular Probes, Inc. Bio-Rad Laboratories is licensed by Molecular Probes to sell reagents containing SYBR Green I for use in real-time PCR, for research purposes only.

Directly Upgrade Your iCycler to Real-Time PCR

The iCycler iQ[®] and MyiQ[™] systems require minimal setup and are used with Bio-Rad's high-quality PCR reagents for unsurpassed performance in quantitative PCR. The iCycler

iQ and MyiQ systems are coupled with intuitive software packages to streamline assay setup and data analysis.

Key features such as a real-time thermal gradient, melt-curve analysis, and standard-curve

efficiency calculators minimize assay optimization time by presenting essential information about assay performance. Whether you opt for unmatched flexibility in multiplex PCR with the iCycler iQ system, or success with single-color analysis on the MyiQ system, these module upgrades and best-in-class reagents are perfect partners for your PCR applications.



Ordering Information

Catalog # Description

Real-Time Upgrade

170-8740	iCycler iQ Real-Time PCR Detection System
170-9740	MyiQ Single-Color Real-Time PCR Detection System

Real-Time Reagents

170-8860	iQ [™] Supermix, 100 x 50 μl reactions
170-8862	iQ Supermix, 500 x 50 μl reactions
170-8864	iQ Supermix, 1,000 x 50 μl reactions
170-8880	iQ [™] SYBR [®] Green Supermix, 100 x 50 μl reactions
170-8882	iQ SYBR Green Supermix, 500 x 50 μl reactions
170-8884	iQ SYBR Green Supermix, 1,000 x 50 μl reactions
170-8885	iQ SYBR Green Supermix, 2,000 x 50 μl reactions (50 ml bottle)
170-8874	dNTP Mix, 200 μl premixed solution, contains 10 mM each dNTP (dATP, dCTP, dGTP, dTTP)
170-8870	iTaq DNA Polymerase, 5 U/μl, includes 250 U polymerase, 1.25 ml 10x PCR buffer, 1.25 ml 50 mM MgCl ₂ solution
170-8875	iTaq DNA Polymerase, 5 U/μl, 5,000 U
170-8892	iScript One-Step RT-PCR Kit With SYBR Green, 50 reactions
170-8893	iScript One-Step RT-PCR Kit With SYBR Green, 200 reactions
170-8894	iScript One-Step RT-PCR Kit for Probes, 50 reactions
170-8895	iScript One-Step RT-PCR Kit for Probes, 200 reactions

For more information on Bio-Rad's solutions for real-time PCR applications, request bulletin 2448.

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