

CFX96™ Real-Time PCR Detection System–IVD

Bio-Rad's CFX96 real-time PCR detection system–IVD for in vitro diagnostic use is designed with reliability and performance in mind. With five-target detection, unsurpassed thermal cycler performance, and easy-to-use software, the CFX96 system–IVD offers the ultimate flexibility in commercial assay selection or rapid assay development.

The CFX96 real-time PCR detection system–IVD makes it easy for you to:

- Generate robust results right away with factory-calibrated optics and fast system setup
- Conserve samples and reduce reagent cost using up to 5-target multiplexing with reaction volumes as low as 10 µl
- Streamline data analysis with built-in analysis modules and sophisticated quality control (QC) tools
- Create a personalized system setup with user-specific system access settings and flexible instrument configurations



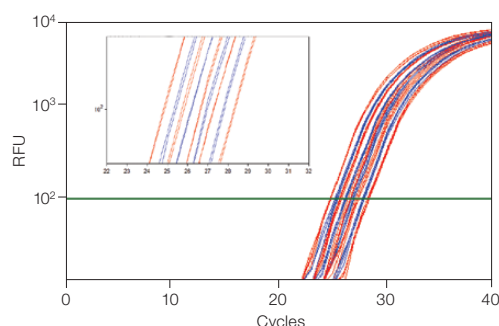
Specifications

C1000™ Thermal Cycler with 96-Well Reaction Module			
Maximum ramp rate	5°C/sec	Gradient	
Average ramp rate	3.3°C/sec	Operational range	30–100°C
Heating and cooling method	Peltier	Programmable span	1–24°C
Lid	Heats up to 105°C	Temperature range	0–100°C
		Temperature accuracy	±0.2°C of programmed target at 90°C
		Temperature uniformity	±0.4°C well-to-well within 10 sec of arrival at 90°C
Optical Detection			
Excitation	6 filtered LEDs	Dynamic range	10 orders of magnitude
Detection	6 filtered photodiodes	Scan time	
Range of excitation/emission wavelengths	450–730 nm	All channels	12 sec
Sensitivity	Detects 1 copy of target sequence in human genomic DNA	Single channel fast scan	3 sec
Software			
Operating systems	Windows XP, Windows Vista, Windows 7	Data export	Save, copy, and print all graphs and spreadsheets from right-click menu
Multiplex analysis	Up to 5 targets per well		Export specified data in multiple formats
Data analysis modes	PCR quantification with standard curve		Copy and paste into Microsoft Excel, Word, or PowerPoint file
	Melt curve analysis		Customizable reports containing run settings, data graphs, and spreadsheets can be directly printed or saved as PDFs
	Gene expression analysis by relative quantity (ΔC_q) or normalized expression ($\Delta\Delta C_q$) with multiple reference genes and individual reaction efficiencies		
	Multiple file gene expression analysis		
	Allelic discrimination		
	End-point analysis		
System			
Sample capacity	96 wells	Dimensions (W x D x H)	33 x 46 x 36 cm (13 x 18 x 14")
Sample size	1–50 µl (10–25 µl recommended)	Weight	21 kg (47 lb)
Communication	USB 2.0	Real-time PCR license	Yes
Electrical approvals	IEC, CE	In vitro diagnostic license	Yes
		CE-IVD mark	Yes

Simplicity through Innovation™

The CFX96 real-time PCR detection system–IVD is built on Bio-Rad's proven 1000-series thermal cycling platform. The system incorporates innovative optical technologies with long-lasting LEDs and solid-state components to provide maximal reliability and flexibility.

- Scanning optics read each well individually with high sensitivity and no cross talk to deliver optimal quantitative results
- Multiple data acquisition modes, including a fast scan option for EvaGreen or SYBR® Green I users and an all channels mode to detect up to 5 targets in a single well, let a run be tailored to suit the application
- Several control configurations are available — run a stand-alone system or independently run up to 4 instruments from 1 computer
- A startup wizard, intuitive experiment setup, and streamlined data analysis enable fast result turnaround



Exceptional reproducibility can be achieved with SsoFast™ EvaGreen® supermix. Efficient discrimination and reliable quantification can be obtained from 1.33-fold serial dilutions of input template. The *CBP* gene was amplified from varying amounts of human genomic DNA. From left to right: (■) 5 ng, 2.83 ng, 1.60 ng, 903 pg, and 511 pg; (■) 3.76 ng, 2.13 ng, 1.20 ng, and 679 pg. *CBP* efficiency = 96.5%, $R^2 = 0.996$. Inset is a magnified view showing robust discrimination and reproducible amplification. RFU, relative fluorescence units.

Software Solutions for Accurate Results

CFX Manager™ software offers tools to simplify real-time PCR for every laboratory. Immediately generate results using the Startup Wizard and intuitive experiment setup. Enter or edit well information before, during, or after a run.

Analyze data when and where you want by receiving an email with an attached data file when a run is completed. When data are in hand, use the comprehensive data analysis, QC, and report tools to take the guesswork out of analyzing and reporting results for any real-time PCR application.

The CFX96 real-time PCR detection system–IVD is licensed for human in vitro diagnostics and all other applied fields except veterinary diagnostics. The system is CE-IVD marked in compliance with the European Union diagnostic medical device manufacturing standards.

Ordering Information

Catalog #	Description
185-5095-IVD	CFX96 Real-Time PCR Detection System–IVD with CFX Manager Software Version 1.6 , CE-IVD marked, includes C1000 thermal cycler chassis, CFX96 optical reaction module–IVD, CFX Manager software version 1.6, qbase ^{PLUS} software license, communication cable

Note: This product is not available for sale in the United States, Canada, Europe (Austria, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Portugal, Sweden), Japan, and Australia.

EvaGreen is a trademark of Biotium, Inc. Bio-Rad Laboratories, Inc. is licensed by Biotium, Inc. to sell reagents containing EvaGreen dye for use in real-time PCR, for research purposes only. Excel, Microsoft, PowerPoint, Windows, and Windows Vista are trademarks of Microsoft Corporation. SYBR is a trademark of Molecular Probes, Inc.

Notice regarding Bio-Rad thermal cyclers and real-time systems:

Purchase of this instrument conveys a limited non-transferable immunity from suit for the purchaser's own internal research and development and for use in human in vitro diagnostics and all other applied fields under U.S. Patent Number 5,475,610 (Claims 1, 44, 158, 160–163, and 167 only), or corresponding claims in its non-U.S. counterpart, owned by Applied Biosystems. No right is conveyed expressly, by implication, or by estoppel under any other patent claim, such as claims to apparatus, reagents, kits, or methods such as 5' nuclease methods. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

Bio-Rad's real-time thermal cyclers are licensed real-time thermal cyclers under Applied Biosystems' U.S. Patent Number 6,814,934 B1 for use in research, human in vitro diagnostics, and all other fields except veterinary diagnostics.

Bio-Rad's real-time thermal cyclers are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Numbers 6,767,512 and 7,074,367.

Notice regarding SsoFast EvaGreen supermix:

Purchase of this product includes an immunity from suit under patents specified in the product insert to use only the amount purchased for the purchaser's own internal research. No other patent rights are conveyed expressly, by implication, or by estoppel. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.



BIO-RAD

**Bio-Rad
Laboratories, Inc.**

Life Science
Group

Web site www.bio-rad.com **USA** 800 424 6723 **Australia** 61 2 9914 2800 **Austria** 01 877 89 01 **Belgium** 09 385 55 11 **Brazil** 55 31 3689 6600
Canada 905 364 3435 **China** 86 21 6169 8500 **Czech Republic** 420 241 430 532 **Denmark** 44 52 10 00 **Finland** 09 804 22 00
France 01 47 95 69 65 **Germany** 089 31 884 0 **Greece** 30 210 777 4396 **Hong Kong** 852 2789 3300 **Hungary** 36 1 459 6100 **India** 91 124 4029300
Israel 03 963 6050 **Italy** 39 02 216091 **Japan** 03 6361 7000 **Korea** 82 2 3473 4460 **Malaysia** 60 3 2117 5260 **Mexico** 52 555 488 7670
The Netherlands 0318 540666 **New Zealand** 64 9 415 2280 **Norway** 23 38 41 30 **Poland** 48 22 331 99 99 **Portugal** 351 21 472 7700
Russia 7 495 721 14 04 **Singapore** 65 6415 3170 **South Africa** 27 861 246 723 **Spain** 34 91 590 5200 **Sweden** 08 555 12700
Switzerland 061 717 95 55 **Taiwan** 886 2 2578 7189 **Thailand** 66 2 6518311 **United Kingdom** 020 8328 2000