

CFX96 Touch Deep Well™ Real-Time PCR Detection System

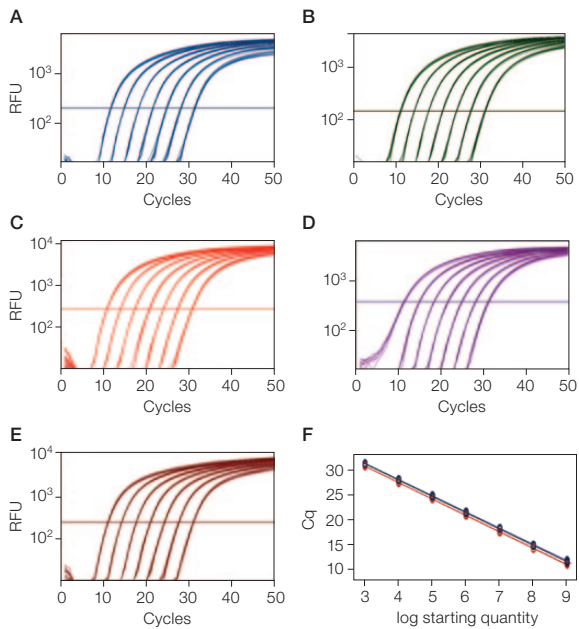
Advancing qPCR Together

The CFX96 Touch deep well real-time PCR detection system offers industry-leading performance for large-volume reactions. Solid-state optical components provide sensitive detection for up to five targets with precise quantification and target discrimination. Easily start a run and monitor its progress on the integrated touch screen for a truly stand-alone experience. CFX Manager™ software provides intuitive experiment setup and data analysis modules, including gene expression by normalized expression ($\Delta\Delta Cq$) using multiple reference genes and individual reaction efficiencies in the calculations, for all levels of users.

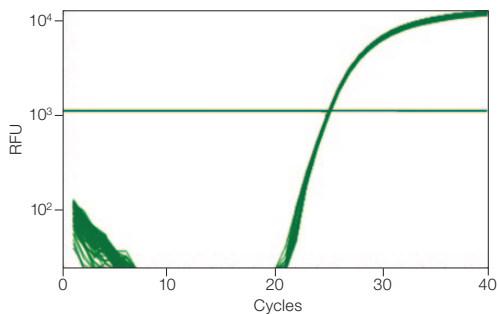


Specifications

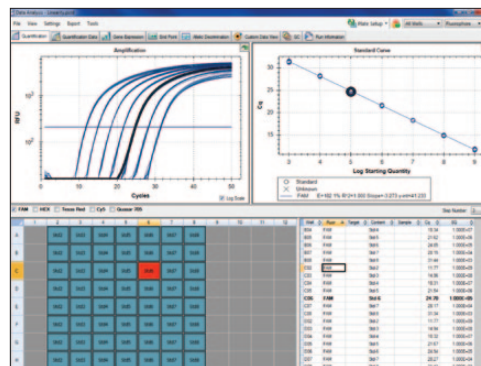
C1000 Touch™ Thermal Cycler with 96-Deep Well Reaction Module			
Maximum ramp rate	2.5°C/sec	Temperature range	0–100°C
Average ramp rate	2°C/sec	Temperature accuracy	±0.2°C of programmed target at 90°C
Heating and cooling method	Peltier	Temperature uniformity	±0.4°C well-to-well within 10 sec of arrival at 90°C
Lid	Heats up to 105°C		
Gradient			
Operational range	30–100°C		
Programmable span	1–24°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 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 Melt curve analysis Gene expression analysis by relative quantity (ΔCq) or normalized expression ($\Delta\Delta Cq$) with multiple reference genes and individual reaction efficiencies Data analysis options include bar chart, clustergram, scatter plot, volcano plot, and heat map Multiple file gene expression analysis Allelic discrimination End-point analysis		Copy and paste into Microsoft Excel, Word, or PowerPoint file Customizable reports containing run settings, data graphs, and spreadsheets can be directly printed or saved as PDFs
System			
Licensed for real-time PCR	Yes	Electrical approvals	IEC, CE
Sample capacity	96 wells	Dimensions (W x D x H)	33 x 46 x 36 cm (13 x 18 x 14")
Sample size	10–125 μ l	Weight	21 kg (47 lb)
Communications	USB 2.0		



Linearity of five-target multiplex detection. A–E, fluorescence data from a series of tenfold dilutions of plasmid DNA (10^9 – 10^3 copies) amplified using reporter dyes to monitor five targets in a 75 μ l reaction volume: ■, FAM/cyclophilin; ■, HEX/GAPDH; ■, Texas Red/actin; ■, Cy5/tubulin; ■, Quasar 705/IL-1 β ; F, standard curves generated from data in A–E, reaction efficiencies range from 100 to 102%. Cq, quantification cycle; RFU, relative fluorescence units.



Excellent uniformity. IL-1 β plasmid template was diluted to 10^5 copies/reaction and amplified in the presence of a FAM-labeled detection probe with iQ[™] supermix. Graph shows 96 replicates of 100 μ l reactions. Average Cq = 25.14 \pm 0.10. RFU, relative fluorescence units.



CFX Manager software data analysis module.

Ordering Information

Catalog #	Description
185-4096	CFX96 Touch Deep Well Real-Time PCR Detection System , includes C1000 Touch thermal cycler chassis, CFX96 Deep Well [™] optical reaction module, CFX Manager software, license for qbase ^{PLUS} software, communication cable, reagents, consumables
185-4095	CFX96 Touch Deep Well Real-Time PCR Detection System , includes C1000 Touch thermal cycler chassis, CFX96 Deep Well optical reaction module, CFX Manager software, license for qbase ^{PLUS} software, communication cable
184-4096	CFX96 Deep Well Optical Reaction Module , for use with C1000 Touch thermal cycler chassis, includes CFX Manager software, license for qbase ^{PLUS} software, communication cable, reagents, consumables
184-5008	CFX Manager Software, Chinese Edition , includes 3 user licenses, installation CD, 3 HASP HL keys
184-5028	CFX Manager Software, Russian Edition , includes 3 user licenses, installation CD, 3 HASP HL keys
184-5025	Precision Melt Analysis[™] Software , includes 2 user licenses, installation CD, 2 HASP HL keys, melt calibration kit
170-8841	iScript[™] Reverse Transcription Supermix for RT-qPCR , 100 x 20 μ l reactions, includes 400 μ l 5x iScript RT supermix and iScript RT supermix no-RT control
172-5260	SsoAdvanced[™] SYBR[®] Green Supermix , 2 ml (2 x 1 ml), 200 x 20 μ l reactions, 2x real-time PCR mix, contains dNTPs, Sso7d fusion polymerase, MgCl ₂ , SYBR [®] Green I, stabilizers
172-5230	SsoFast[™] Probes Supermix , 2 ml (2 x 1 ml), 200 x 20 μ l reactions, 2x real-time PCR mix, contains dNTPs, Sso7d fusion polymerase, MgCl ₂ , stabilizers
HSP-9601	Hard-Shell[®] Low-Profile 96-Well Skirted PCR Plates , white shell, clear well, 50
MSB-1001	Microseal[®] 'B' Adhesive Seals , optically clear, 100 seals

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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 Applera Corporation. 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 Applera's 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.

Practice of the patented 5' Nuclease Process requires a license from Applied Biosystems. The purchase of these products 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 when used with the separate purchase of Licensed Probe. No other patent rights are conveyed expressly, by implication, or by estoppel. Further information on purchasing licenses may be obtained from the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

Hard-Shell plates are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Numbers 7,347,977; 6,340,589; and 6,528,302.



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