

CFX96 Touch Deep Well Real-Time PCR System for Food and Water Safety Testing

Specifications

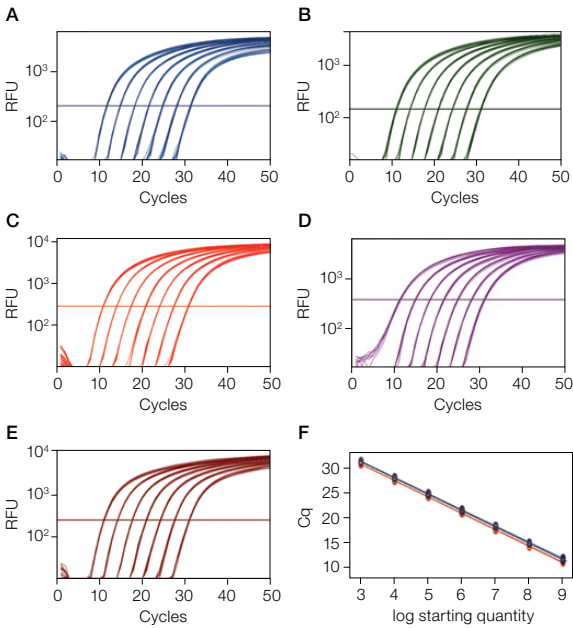
The Power of PCR

The CFX96 Touch Deep Well Real-Time PCR System offers precise discrimination for up to five targets in large-volume reactions. The system incorporates industry-leading technology to provide a robust and easy-to-use real-time PCR instrument for reliable results. CFX Manager Software, Industrial Diagnostic Edition (IDE) allows for easy sample setup, results analysis, and bidirectional LIMS connection when running iQ-Check Kits for detection of food- and waterborne pathogens.

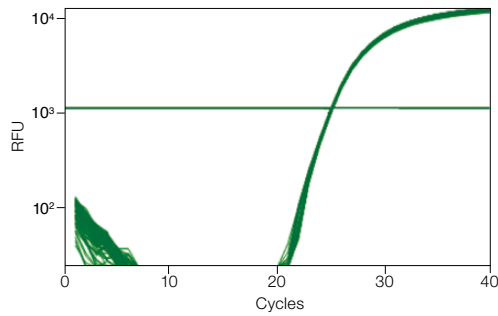


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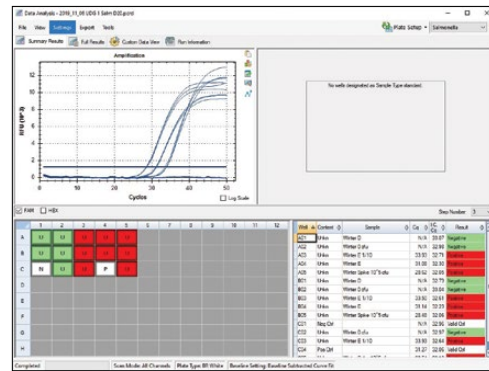
C1000 Touch Thermal Cycler with 96-Deep Well Reaction Module			
Maximum ramp rate	2.5°C/sec	Temperature range	0–100°C
Average ramp rate	2°C/sec	Temperature accuracy	±0.2°C of programmed target at 90°C
Heating and cooling method	Peltier	Temperature uniformity	±0.4°C well-to-well within 10 sec of arrival 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 Pro or Windows 10 Enterprise (64-bit only)	Data export	Save, copy, and print all graphs and spreadsheets from right-click menu
Memory	2 GB RAM		Export specified data in multiple formats
Storage	10 GB hard drive		Copy and paste into Microsoft Excel, Word, or PowerPoint file
USB	USB 2.0 high-speed port		Customizable reports containing run settings, data graphs, and spreadsheets can be directly printed or saved as PDFs
Multiplex analysis	Up to 5 targets per well		
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		
	Endpoint analysis		
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 in.)
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/L-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 ± 0.10 . RFU, relative fluorescence units.



CFX Manager Software, IDE data analysis module.

Ordering Information

Catalog #	Description
3600037	CFX96 Touch Deep Well Real-Time PCR System
3593893	CFX Manager Software, Industrial Diagnostic Edition (IDE)
HSP9655XTU	Hard-Shell 96-Well PCR Plates, low profile, thin wall, skirted, white shell/white well
HSP9955XTU	Hard-Shell 96-Well PCR Plates, barcoded, low profile, thin wall, skirted, white shell/white well
MLL9651XTU	Multiplate 96-Well PCR Plates, low profile, unskirted
MSB1001XTU	Microseal 'B' Adhesive Seals
TLS0851XTU	Low-Profile 8-Tube PCR Strips without Caps, 0.2 ml
TCS0803XTU	Optical Flat 8-Cap Strips, for 0.2 ml PCR tubes
iQ-Check Kits	
12010806	iQ-Check <i>Aspergillus</i> PCR Detection Kit, 96 reactions
3578135	iQ-Check <i>Campylobacter</i> PCR Detection Kit, 96 reactions
3578137	iQ-Check <i>Cronobacter</i> PCR Detection Kit, 96 reactions
12003068	iQ-Check <i>Enterobacteriaceae</i> PCR Detection Kit, 96 reactions
3578114	iQ-Check <i>E.coli</i> O157:H7 PCR Detection Kit, 96 reactions
3578124	iQ-Check <i>Listeria monocytogenes</i> II PCR Detection Kit, 96 reactions
3578113	iQ-Check <i>Listeria</i> spp. PCR Detection Kit, 96 reactions

Catalog #	Description
3578123	iQ-Check <i>Salmonella</i> II PCR Detection Kit, 96 reactions
3578142	iQ-Check <i>S. Enteritidis</i> PCR Detection Kit, 96 reactions
12004306	iQ-Check <i>S. Typhimurium</i> PCR Detection Kit, 96 reactions
3578139	iQ-Check STEC VirX PCR Detection Kit, 96 reactions
12013174	iQ-Check STEC SerO II PCR Detection Kit, 32 reactions
12006574	iQ-Check <i>Vibrio</i> PCR Detection Kit, 96 reactions
3578104	iQ-Check Screen <i>Legionella</i> spp. Real-Time PCR Detection Kit, 96 reactions
3578105	iQ-Check Screen <i>L. pneumophila</i> Real-Time PCR Detection Kit, 96 reactions
3578102	iQ-Check Quanti <i>Legionella</i> spp. Real-Time PCR Quantification Kit, 96 reactions
3578103	iQ-Check Quanti <i>L. pneumophila</i> Real-Time PCR Quantification Kit, 96 reactions
3548101	VINEO <i>Brettanomyces</i> PCR Kit, 96 reactions

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