

ViPlex Fluor 16 Real-Time PCR System



ViPlex Fluor16 Real-Time PCR System

Mini • Portability • Reliable



ViPlex Fluor16 Real-time PCR System is a mini, portable and robust real-time PCR platform designed for accurate, sensitive, and reproducible nucleic acid quantification. Utilizing advanced fluorescence detection and precise thermal control, the system supports reliable amplification and real-time analysis across a wide range of research and field applications, delivering fast and dependable results wherever testing is required.

Designed with mobility and efficiency in mind, the ViPlex Fluor16 features a compact, space-saving footprint that fits seamlessly into crowded labs, shared workspaces, and satellite research units. Its lightweight build makes it easy to move between laboratories or bring directly to the field, giving researchers true flexibility wherever testing is needed. Even with its small size, the ViPlex Fluor16 delivers outstanding precision in thermal control and highly stable fluorescence detection; providing reliable real-time PCR performance on par with full-size benchtop systems.

Applications

- Absolute and relative quantification, genotyping and SNP analysis, HRM and melting curve
- Applied to pathogen research (RUO), agricultural and environmental research, food and industrial research, and general molecular biology applications.





Features



Portable & Compact Design

Ideal for small labs, point-of-care settings, and mobile use.



16-Well Capacity

Efficient throughput for medium to low-sample volume workflows.



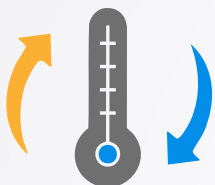
High Sensitivity Fluorescence Detection

Sensitive & reliable fluorescence measurement for accurate quantification with 4 channels



Intuitive Interface

10" HD Large touchscreen control and built-in analysis software for easy setup and data visualization.



Dual Temperature Control Modes

Supports temperature control in block or tube modes, suitable for flexibility in protocols.



**DR. VIVA
MELEON**

Technical Data

Specifications	ViPlex Fluor16 Real-Time PCR System
Sample capacity	2 lines x 8 wells x 0.2ml (single block)
Consumables	Clear 0.2ml flat PCR tubes / 8-tube flat PCR strips
Reaction volume	5 - 100µl
Dynamic range	1-10 ¹⁰ copies
Light source	High-brightness LED
Detector	PD - Photodiode
Detection location	Side detection
Scanning speed	< 2seconds for 16 wells
Ramp rate (max.)	≥6°C/s
Temperature uniformity	≤±0.1°C
Temperature accuracy	≤±0.1°C
Temperature precision	≤±0.1°C
Temperature range	4 - 105°C
Heated lid temperature	30 - 110°C (adjustable, default 105°C)
Fluorescence intensity detection repeatability	CV ≤3%
Temperature control	Block / tube
Detection Channels	Up to 4 fluorescence channels
Multiplexing	Channel 1: FAM™/SYBR Green Channel 2: HEX™/VIC®/TET™/JOE™/TAMRA/NED™/Cy3™ Channel 3: ROX™/Texas Red® Channel 4: Cy5™
Excitation wavelength	400 - 800nm
Emission wavelength	500 - 800nm
Excitation light source	high-brightness LED
Display	10-inch high-definition color touch screen
Operation system	PC software (developing), touch screen machine software
Data management	LIS connectivity
Power-off protection function	Yes, data restored after power-on
Communication ports	USB Type-A port x 2; USB Type-B port; RJ45 port
Power supply	DC15V 255W
Voltage	100-240V; 1000W 50/60Hz
Dimension (W x D x H)	290 x 250 x 220mm
Weight	7kg

Ordering information:

Catalogue No.	Description
MC40164	ViPlex Fluor16 Real-time PCR System, 16 well x 0.2ml block, 4 channels





Master mixes selection guidelines for system compatibility

To calibrate a real-time PCR reaction, various formulations of Master Mixes are available for most of the platforms.

Representation	Compatible Hardware
Original (No ROX)	Analytik Jena qTower series, BioRad iCycler all series, BioRad CFX96 & CFX384, Cepheid SmartCycler®, Eppendorf Mastercycler series, Fluidigm BioMark™, Illumina Eco, MJ Chromo4, Opticon, PCRMax Eco™, Roche lightcycler® series, Qiagen RotorGene, Thermo PikoReal™
Low ROX (LR)	Agilent / Stratagene MX MX3000P®, MX3005P®, MX4000®, Applied Biosystems 7500 and 7500 FAST platform, QuantStudio™, ViiA7
ROX (R)	Applied Biosystems 7000, 7300, 7700, 7900 and 7900HT FAST platforms, OpenArray PRISM 7000, 7700, 7900, GeneAmp® 5700, StepOne™, StepOne™ PLUS

ViPrimePLUS qPCR/RT-qPCR Master Mixes

Superior performance for high efficiency qPCR work

ViPrimePLUS qPCR/RT-qPCR Master Mixes are next generation mixes designed for rapid and convenient real-time PCR reactions. The ready-to-use master mixes comprise of all necessary PCR components at optimal concentration to achieve excellent results in reaction efficiency, correlation coefficient and slope. Our master mixes are highly sensitive to detect the extremely low copy number of targets. They are also designed to prevent the formation of primer dimers and non-specific products which render in highly reliable quantification. Various types and formulations of real-time PCR master mixes are available to be compatible with most of the real-time PCR instruments in the market.

ViPrimePLUS Real-time PCR Master Mixes with AtTaq DNA Polymerases

DNA Master Mixes	No ROX	Low ROX	ROX
Original	QLMM01	QLMM01-LR	QLMM01-R
Premixed with SYBR® Green	QLMM02	QLMM02-LR	QLMM02-R
Premixed with EvaGreen®	QLMM07	QLMM07-LR	QLMM07-R
RNA Master Mixes	No ROX	Low ROX	ROX
Original	QLMM03	QLMM03-LR	QLMM03-R
Premixed with SYBR® Green	QLMM04	QLMM04-LR	QLMM04-R
Premixed with EvaGreen®	QLMM08	QLMM08-LR	QLMM08-R

ViPrimePLUS Real-time PCR Master Mixes with Taq DNA Polymerases

DNA Master Mixes	No ROX	Low ROX	ROX
Original	QLMM11	QLMM11-LR	QLMM11-R
Premixed with SYBR® Green	QLMM12	QLMM12-LR	QLMM12-R
Premixed with EvaGreen®	QLMM17	QLMM17-LR	QLMM17-R
RNA Master Mixes	No ROX	Low ROX	ROX
Original	QLMM13	QLMM13-LR	QLMM13-R
Premixed with SYBR® Green	QLMM14	QLMM14-LR	QLMM14-R
Premixed with EvaGreen®	QLMM18	QLMM18-LR	QLMM18-R

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