

Real-Time PCR Instruments Available from Roche Applied Science

Real-time PCR offers an alternative method for both qualitative and quantitative analysis. This type of analysis allows the amplification and fluorescent detection steps to be performed by a single instrument in a single tube with data recorded online. A real-time PCR instrument measures the accumulation of PCR products during amplification with fluorescent dyes. Because PCR itself and the detection of PCR products occur in the same reaction (vessel), this set-up is also called "homogeneous PCR".

The LightCycler® System incorporates several features that make it the ideal tool for qualitative and quantitative PCR as well as mutation analysis in general laboratory applications. It includes instrumentation, software, reagents, technical support, and application-specific kits.

Two real-time PCR systems are available from Roche Applied Science:



The LightCycler® Carousel-Based System (LightCycler® 2.0 Instrument, Cat. No.: 03 531 414 201).

The LightCycler® 2.0 Instrument is optimized for two fluorescence detection formats: SYBR Green I and HybProbe probes. In addition, the instrument supports a wide variety of other fluorescence detection formats, such as monocolour SimpleProbe probes, hydrolysis probes, and other formats based on FRET (fluorescence resonance energy transfer).



The LightCycler® 480 System (Cat. No. 04 640 268 001 → 96 well; Cat. No. 04 545 885 001 → 384 well) is a modular online PCR device for qualitative or quantitative detection of nucleic acids, mutation screening and genotyping. It meets the needs of a broad range of scientific applications in genomics research, such as array validation, gene-knockdown studies, and SNP analysis.

Offering the sensitivity and accuracy one has come to expect only from Roche Applied Science's LightCycler® Carousel-Based System, the LightCycler® 480 Real-time PCR System goes one step further providing enhanced 96- or 384-multiwell throughput.

The LightCycler® 480 System setup enables the use of all current probe formats (e.g., SYBR Green I, HybProbes probes, SimpleProbe probes, Hydrolysis probes).

For details concerning the instruments, reagents and software please refer to <http://www.lightcycler.com> and <http://www.lightcycler480.com>

Reagents for Real-Time PCR

Roche Applied Science offers tailor-made reagents for all real-time PCR applications. For reagents developed for the LightCycler® Instrument please refer to our website www.lightcycler.com. If you are still using a different real-time PCR instrument than the LightCycler® Instrument, you can choose from our list of dedicated reagents. For details please refer to: www.roche-applied-science.com.

Discover also the powerful combination of the ProbeFinder Software, the Universal ProbeLibrary, the Transcriptor First Strand cDNA Synthesis Kit, and the FastStart TagMan® Probe Master. Revolutionize the way you design and perform real-time qPCR assays on various real-time PCR instruments. For qPCR experiments on instruments requiring normalization with Rox reference dye the FastStart Universal Probe Master (Rox) and the FastStart Universal SYBR Green Master (Rox) are available from Roche Applied Science. For more information, please visit www.roche-applied-science.com/qpcr.

