



DNA Engine Opticon 2

With our DNA Engine Opticon 2 the USU Genomic facility will begin offering quantitative PCR as a service two tier service. The first level of service will be user driven. We will program your protocol and run any plates that are set up by the user. The second level of service will be directed by the user, driven by the USU Genomic facility. We will use your primers and template and set up the experiment from start to finish. The USU Genomic facility will also provide software and technical support for your data analysis. The service is also available to off-campus researchers.

The DNA Engine Opticon 2 Continuous Fluorescence Detection System Multicolor capability allows detection of SYBR, Green I, or FAM in the first channel and a range of fluorophores in the second channel. This researcher-oriented software offers sensitive dual-PMT detection in a robust, no-moving-part design.

Key features of the DNA Engine 2 Opticon RT-PCR

- Multicolor capability allows detection of SYBR, Green I or FAM in the first channel, and a range of fluorophores in the second channel including TET, HEX, VIC, and TAMRA for a multitude of applications such as RT-qPCR and allelic discrimination.
- DNA Engine thermal cycler offers precision thermal control and a temperature gradient feature permits simultaneous incubation at 12 different temperatures to optimize reactions in a single run.
- Real-time results allow for plotting of signal intensity vs. cycle number and graphically monitoring the thermal profile during the run.
- Extraordinary sensitivity permits reliable detection of one initial template copy, while delivering a linear range of up to ten orders of magnitude in starting copy number (with appropriate chemistry).
- Researcher-oriented software allows quantification of samples and generation of melting curves to verify product identity.
- Innovative optical system incorporates an array of 96 LEDs for excitation and a pair of sensitive PMTs for detection in a robust, no-moving-part design.
- High sample capacity accommodates up to 96 samples in standard, low-profile microplates or strip tubes making specialized disposables unnecessary.
- A compact footprint (34cm wide x 47cm deep x 60cm high) ensures that the Opticon system comfortably fits on any lab bench.

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For more information, please call us at 435-760-3688 or visit our web site at http://www.biosystems.usu.edu/core_labs/genomics/