LCGreen® Plus+

Gene Scanning Reagent

Information Sheet

"The only dye for high-throughput, Hi-Res Melting™ analysis."

Our new LCGreen PLUS is manufactured exclusively by Idaho Technology and is designed specifically for high resolution melting curve analysis to detect DNA sequence variants (SNP's, insertions / deletions).

Product Information

- LCGreen dyes are specifically designed for high-resolution melting curve analysis to detect DNA sequence variants (mutations, polymorphisms, etc).
- LCGreen PLUS is a new member of the dye family tailored for use in melting instruments with 96- or 384-well microtiter plates.
- LCGreen PLUS has superb fluorescence intensity, and can be used with other fluorescence based PCR detection systems such as the Roche LightCycler®. For optimal performance, the use of a high-resolution melting instrument is required.
- Optimum excitation: 440 – 470 nm. Optimum emission: 470 – 520 nm. Spectral characteristics depend on buffer composition, pH, ionic strength, and nucleic acid content of the solution.
- Addition of LCGreen dyes increase the melting temperature (Tm) of DNA by about 1 – 3 °C, and may require adjustment of cycling parameters.
- LCGreen dyes are manufactured exclusively by Idaho Technology, and their chemical structures are unique among the scientific and patent literature. Patent pending.

How it is Used

- LCGreen PLUS dye is supplied as a 10X solution in 10mM Tris-HCl, pH 7.4, 0.1 mM EDTA.
- LCGreen PLUS should be **used at 1X** for PCR. Add one volume of 10X solution to nine volumes of the PCR mixture.
- If you are using glass capillary tubes for PCR and/or for melting analysis, make sure your reaction mixture contains bovine serum albumin (BSA) at 250 - 500 µg/mL. BSA helps avoid enzyme, DNA and dye adhesion to the glass surface.

Idaho Technology Inc.

Innovative solutions for pathogen identification and DNA research

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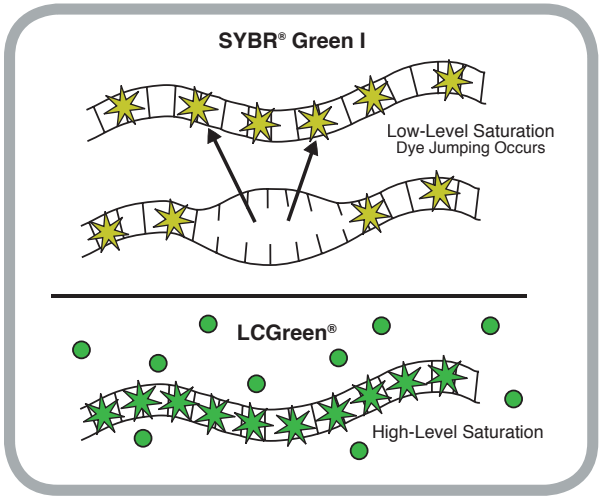
Shipping & Storage

- Product is shipped at ambient temperature.
- Store at – 20 °C upon receipt. Store at 4 °C after first use.
- Product is stable for one year at –20 °C, and up to 2 months at 4 °C.

Related Products

- LightScanner™ (96 or 384 samples, high-resolution melting instrument)
- HR-1™ (single sample, high-resolution melting instrument)
- LCGreen® I gene scanning reagents (for use with Idaho Technology's HR-1)
- 10X BSA

Conventional dsDNA dyes cannot be used at high concentrations due to dye redistribution during melting curve analysis.



Saturation of dsDNA binding sites eliminates potential for dye redistribution during melting curve acquisition.

Package Sizes

No. of Reactions*	1,000	10,000	Larger sizes Inquire
LCGreen PLUS (10X solution)	1 mL	10 X 1 mL	
Catalog No.	BCHM-ASY-0005	BCHM-ASY-0006	

* based on 10 µl reaction volume

References

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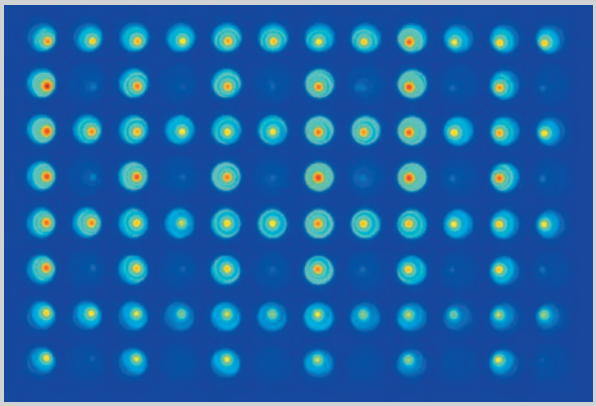

DNA visualized with LCGreen PLUS dye in a 96-well plate with Idaho Technology's LightScanner™ instrument.

BCHM-PRT-0015 Rev 02