

Product Information

- LCGreen PLUS is specifically designed for Hi-Res Melting curve analysis to detect DNA sequence variants (mutations, polymorphisms, etc).
- 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 PLUS increases the melting temperature (T_m) of DNA by about 1 – 3 °C, and may require adjustment of cycling parameters.
- LCGreen PLUS is manufactured exclusively by BioFire Diagnostics, and the chemical structures are unique among the scientific and patent literature.

Directions for Use:

- 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 is now

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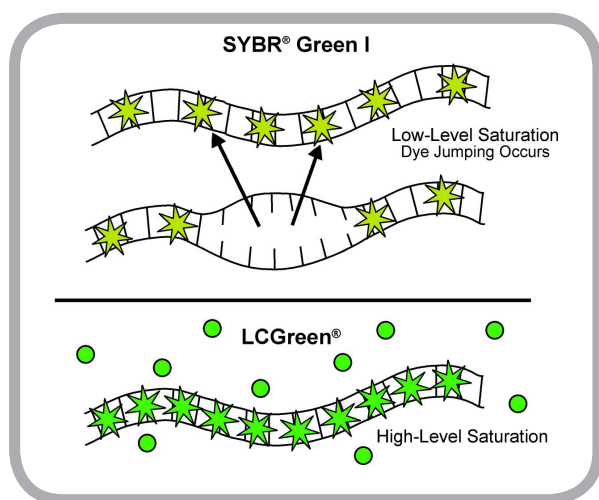
Shipping & Storage

- 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 6 months at 4°C .

Related Products

- LightScanner® System (96 or 384 plate, high-resolution melter)
- LightScanner 32 System (32 capillary tube, high-resolution melter and Real-time PCR)
- HR-1™ Instrument (single sample, high-resolution melter)
- LightScanner Master Mix
- LightScanner High Sensitivity Genotyping Master Mix
- 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

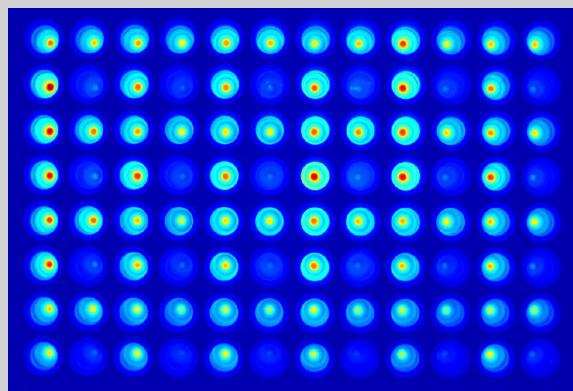
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References

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2. Highsmith WE Jr., **SNPs for sale. Cheap!.** Clin Chem., 50:1296-8, 2004



DNA visualized with LCGreen PLUS dye in a 96-well plate with BioFire Diagnostics' LightScanner instrument.