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.


- 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 10 mM 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.
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.

References


Reviews on High-Resolution Melting


Package Sizes

<table>
<thead>
<tr>
<th>No. of Reactions*</th>
<th>1,000</th>
<th>10,000</th>
<th>Larger sizes Inquire</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCGreen PLUS (10X solution)</td>
<td>1 mL</td>
<td>10 X 1 mL</td>
<td>BCHM-ASY-0005</td>
</tr>
</tbody>
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* based on 10 µl reaction volume

LCGreen, HR-1, LightScanner are trademarks of Idaho Technology Inc. LightCycler is a trademark of a member of the Roche Group. SYBR is a trademark of Molecular Probes.