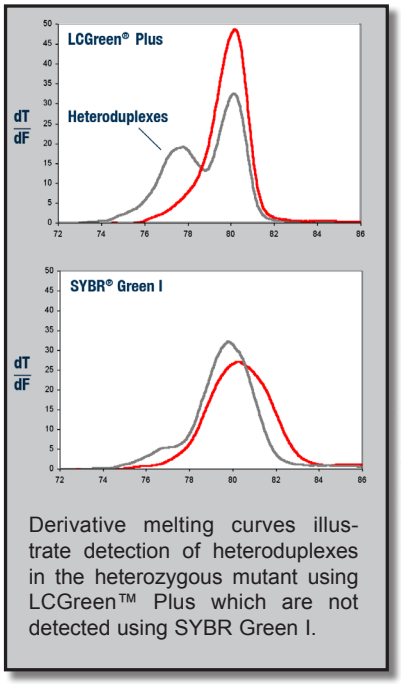
LightScanner® Master Mix Information Sheet



Derivative melting curves illustrate detection of heteroduplexes in the heterozygous mutant using LCGreen™ Plus which are not detected using SYBR Green I.

Designed for Hi-Res Melting® Applications

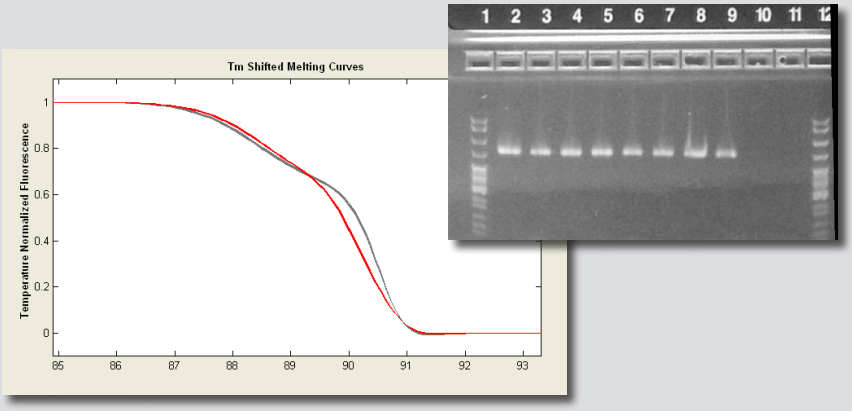
LightScanner Master Mix brilliantly provides a pre-optimized solution specifically designed to deliver superior PCR performance for Hi-Res Melting applications.

Product Benefits

- **Reduce time, save money** easy-to-use premixed formula
- **Secure downstream success** go directly from PCR to melting curve analysis, eliminating the risk of contamination.

Superior PCR Performance

The two images below show the amplification of the Hepatic Lipase gene (301 bp) using 100 ng human genomic DNA using the LightScanner Master Mix. Superior reproducibility is demonstrated by the overlapping curves of 24 replicate samples of both the wild type and mutant samples.



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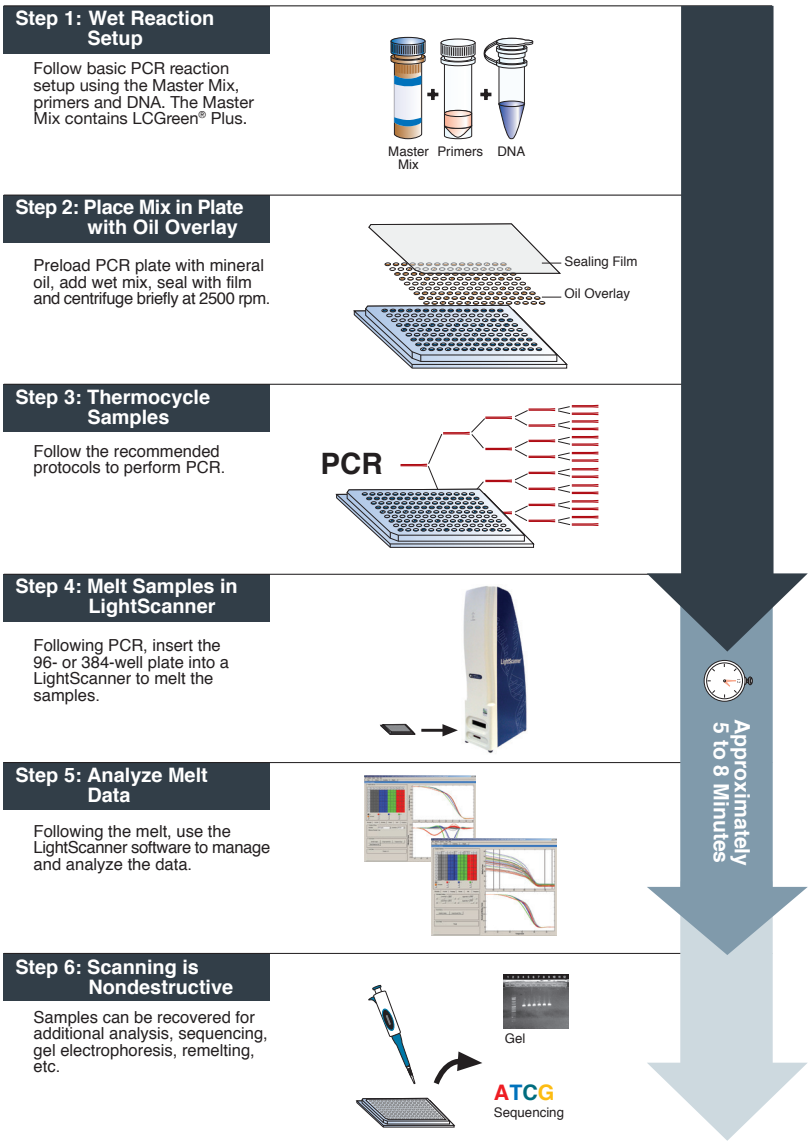
LightScanner® Work Flow

The LightScanner System was developed to integrate seamlessly into existing laboratory work flows. The process is nondestructive so samples can be recovered for additional analysis.



Shipping and Storage

- Store at -20 ºC for up to 1 year.
- Once thawed store at 4 ºC for 2 weeks.
- LightScanner Master Mix is shipped on dry ice.

Kit Contents

Quantity	Description
1 x 100 Rxn	2.5 X Master Mix
1.5 mL	10 mM $MgCl_2$
1.5 mL	Reagent Grade Water
1	LightScanner Master Mix User's Guide

Ordering Information

No. of Rxns	100	500	Larger sizes Inquire
Catalog No.	HRLS-ASY-0002	HRLS-ASY-0003	

The purchase of these products includes a limited, nontransferable license under specific claims of one or more U.S. patents as listed on BioFire Defense's web site (http://biofiredefense.com/legalnotices) (the "Web Site") and owned by the University of Utah Research Foundation and/or BioFire. Any kits sold with this product and/or discussed herein (i) may be covered by one or more of the U.S. patents, as listed on the Web Site for the product and (ii) include a limited, non-transferable license to use the enclosed amount(s) in such kits according to the specified protocols. Purchase of the LightScanner Master Mix does not convey any PCR license.

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References

1. Olsen RK, Dobrowolski SF, Kjeldsen M, Hougaard D, Simonsen H, Gregersen N, Andresen BS. (2010). ***High-resolution melting analysis, a simple and effective method for reliable mutation scanning and frequency studies in the ACADVL gene***. J Inherit Metab Dis. 33(3): 247-60.
2. Hulvey J, Young J, Finley L, Lamour K. (2010). ***Loss of heterozygosity in Phytophthora capsici after N-ethyl-nitrosourea mutagenesis***. Mycologia. 102(1): 27-32.
3. Audrezet MP, Dabricot A, Le Marechal C, Ferec C. (2008). ***Validation of high-resolution DNA melting analysis for mutation scanning of the cystic fibrosis transmembrane conductance regulator (CFTR) gene***. J Mol Diagn. 10(5): 424-34.
4. Wittwer CT, Reed GH, Gundry CN, Vandersteen JG, Pryor RJ. ***High-resolution genotyping by amplicon melting analysis using LCGreen.*** Clin Chem. 2003 Jun; 49(6):853-60.

Technology Comparisons

1. Chou, L.-S.,Lyon, E. and Wittwer, C. T. ***A comparison of high-resolution melting analysis to denaturing high performance liquid chromatography for mutation scanning: cystic fibrosis transmembrane conductance regulator gene as a model.*** Am J Clin Pathol, 2005 Sep; 124(3):330-8.
2. Herrmann MG, Durtschi JD, Bromley LK, Wittwer CT, Voelkerding KV. ***Amplicon DNA melting analysis for mutation scanning and genotyping: Cross-platform comparison of instruments and dyes.*** Clin Chem. 2006 Mar; 52 (3):494-503. Epub 2006 Jan 19.

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