

LightScanner® Master Mix

Information Sheet

“Achieve consistent, high-quality PCR using the only Master Mix specifically designed for Hi-Res Melting™ applications.”



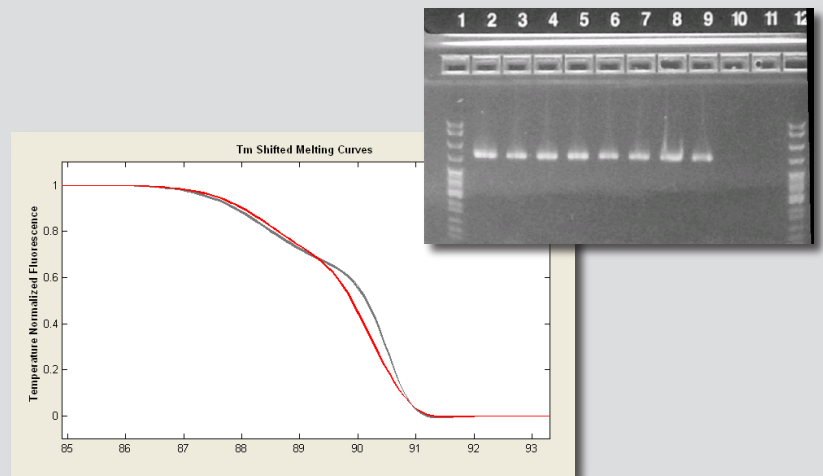
LightScanner Master Mix brilliantly provides a pre-optimized solution specifically designed to deliver superior PCR performance for Hi-Res Melting applications on the LightScanner Instrument.

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.



Innovative solutions for pathogen identification and DNA research

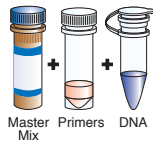
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LightScanner® Work Flow

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.

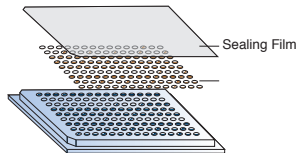
Step 1: Wet Reaction Set-Up

Follow basic PCR reaction set-up using the LightScanner Master Mix, Primers and DNA. LightScanner Master Mix contains LCGreen® Plus.



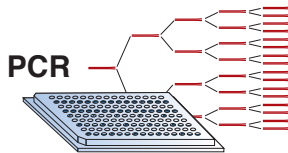
Step 2: Place Mix in Plate with Oil Overlay

Preload PCR-Plate with mineral oil, add wet mix, seal with film and centrifuge briefly at 2500 rpm.



Step 3: Thermocycle Samples

Follow the recommended protocols to perform PCR.



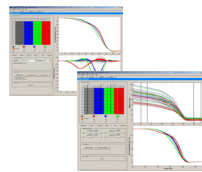
Step 4: Melt Samples in LightScanner

Following PCR, insert the 96 or 384-well plate into a LightScanner to melt the samples.



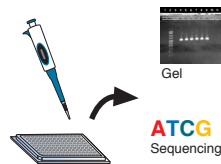
Step 5: Analyze Melt Data

Following the melt, use the LightScanner software to manage and analyze the data.



Step 6: Scanning is Non-Destructive

Samples can be recovered for additional analysis: sequencing, gel electrophoresis, remelting, etc.



Approximately
5 to 8 Minutes

Shipping and Storage

- Store at -20 °C for up to 6 months
- Once thawed store at 4 °C 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	

Contact Information

USA: 1-800-735-6544
Ph: +1 (801) 736-6354
Web: www.idahotech.com
Email: it@idahotech.com

Purchase of the LightScanner Master Mix conveys a limited license to use the quantity purchased for melting curve analysis pursuant to U.S. Publications Nos. 20050233335 and 20060019253. Purchase of the LightScanner Master Mix does not convey any PCR license.

LCGreen, Hi-Res Melting, 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.

References

1. 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.
2. Liew M, Pryor R, Palais R, Meadows C, Erali M, Lyon E, Wittwer C. **Genotyping of single-nucleotide polymorphisms by high-resolution melting of small amplicons.** Clin Chem. 2004 Jul; 50(7):1156-64.
3. Zhou L, Myers AN, Vandersteen JG, Wang L, Wittwer CT. **Closed-tube genotyping with unlabeled oligonucleotide probes and a saturating DNA dye.** Clin Chem. 2004 Aug; 50(8):1328-35. Epub 2004 May 27. editorial
4. Reed GH, Wittwer CT. **Sensitivity and specificity of single-nucleotide polymorphism scanning by high-resolution melting analysis.** Clin Chem. 2004 Oct; 50(10):1748-54. Epub 2004 Aug 12

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.