

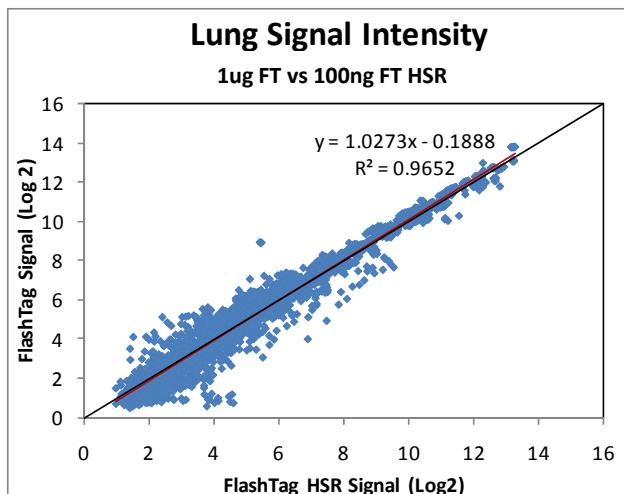
flashtag™ HSR

FlashTag Biotin HSR is the newest high-sensitivity microarray labeling kit designed specifically for use with Affymetrix® miRNA arrays. Using Genisphere's 3DNA technology, FlashTag Biotin HSR produces accurate, validated results from **as little as 100ng Total RNA**.

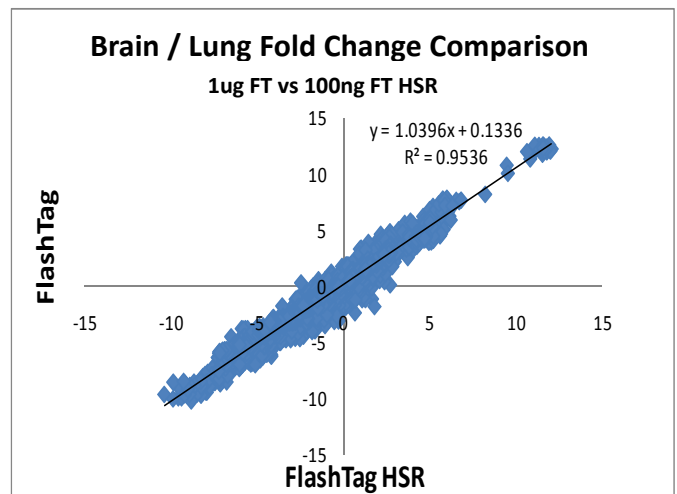
Similar to FlashTag Biotin, Genisphere's first generation labeling kit for Affymetrix miRNA arrays, FlashTag Biotin HSR provides microRNA labeling in 45 minutes, with no purification steps. The FlashTag Biotin HSR kit was modified to make the labeling more sensitive, allowing microRNA profiling from less RNA. Test the new HSR kits at their introductory prices, and start investigating those precious RNA samples with greater sensitivity!

	FlashTag Biotin for Affymetrix miRNA Arrays	FlashTag Biotin HSR for Affymetrix miRNA Arrays
10-assay kit Catalog Number, price	FT10AFYB, \$345	HSR10FTA, \$345
30-assay kit Catalog number, price	FT30AFYB, \$995	HSR30FTA, \$995
Labeling Procedure	2 steps, 45 minutes, no purification	
QC Assay	Plate-based ELOSA QC assay	
Sensitivity	≤ 10 attomoles	≤ 1 attomole
Dynamic Range	4 log ₁₀	
Specificity	1 nucleotide discrimination	
Reproducibility	CVs ≤ 10%	
Input RNA Required	0.5-3ug total RNA, or the LMW RNA from 0.5-3ug total RNA	0.1-1ug total RNA, or the LMW RNA from 0.1-1ug total RNA
Kit Contents	Formamide, required for array hybridization, not included	Formamide, required for array hybridization, <u>included</u>

Using Lung Total RNA, miRNA array signal intensities are similar between 1ug FlashTag and 100ng FlashTag HSR.



Using Brain and Lung Total RNAs, miRNA differentials are similar between 1ug FlashTag and 100ng FlashTag HSR.



To Order:
Phone: 877.888.3DNA
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Web: www.genisphere.com

Genisphere®

SIGNAL + SAMPLE AMPLIFICATION PRODUCTS

*flash*tag™ HSR

RNA Labeling Kit for Affymetrix® GeneChip® miRNA arrays

Characteristics

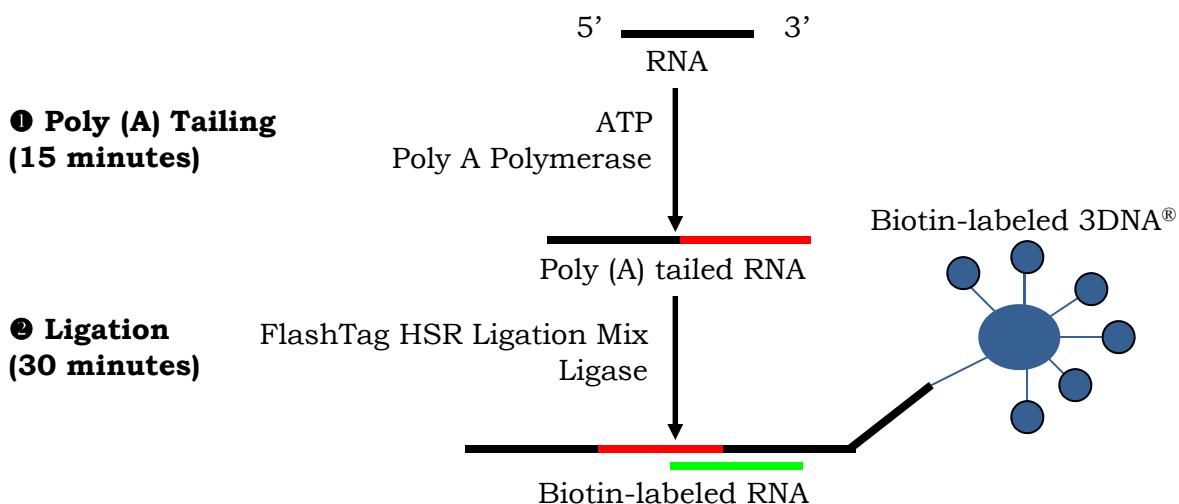
microRNA labeling in 45 minutes
No purification steps
Total RNA or LMW RNA labeling
ELOSA QC Assay

Specifications

Sensitivity: ≤ 1 attomole
Dynamic Range: $4 \log_{10}$
Specificity: 1 nt discrimination
Reproducibility: CVs $\leq 10\%$

Introduction

Low Molecular Weight RNA molecules (miRNA, snRNA, hnRNA, piRNA, etc.) have recently been shown to be involved in important biological processes such as mRNA degradation, transcriptional gene silencing and translational repression. As a result, these newly discovered biomolecules are gaining the interest of the scientific community as possible new drug targets and for use in diagnostics. **FlashTag HSR** provides the tools to identify such targets. The FlashTag HSR kit will label any RNA sample, including total RNA, severely degraded RNA, plant RNA, and low molecular weight RNA. The labeled sample is ready for hybridization to Affymetrix GeneChip miRNA Arrays. FlashTag Biotin HSR produces accurate, validated results from **as little as 100ng Total RNA**.



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References

1. Schembri et al. MicroRNAs as modulators of smoking-induced gene expression changes in human airway epithelium. PNAS 2009 vol. 106 no. 7, 2319-2324.
2. Taylor and Gant. Emerging fundamental roles for non-coding RNA species in toxicology. Toxicology 2008 vol. 246 Issue 1, 34-39.
3. Nilsen et al. Dendritic Nucleic Acid Structures. J. Theor. Biol. 1997, 187:273-284.
4. Stears et al. A novel, sensitive detection system for high-density microarrays using dendrimer technology. Physiol. Genomics. 2000, 3:93-99.

Part Number	Product	Description
Labeling Kits		
HSR10FTA	FlashTag Biotin HSR	10 assays
HSR30FTA	FlashTag Biotin HSR	30 assays
Supporting Products		
FT5ELOSA	ELOSA Plates	5 96-well plates
V25DEX	25% dextran sulfate	1.5mL

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