

FlashTag HSR for FFPE RNA

Affymetrix miRNA Arrays

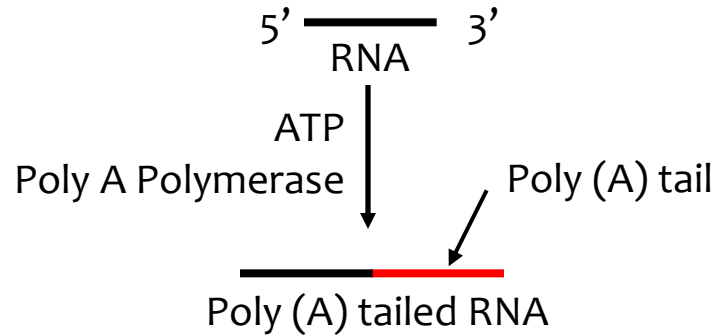
Genisphere[®]

SIGNAL + SAMPLE AMPLIFICATION PRODUCTS

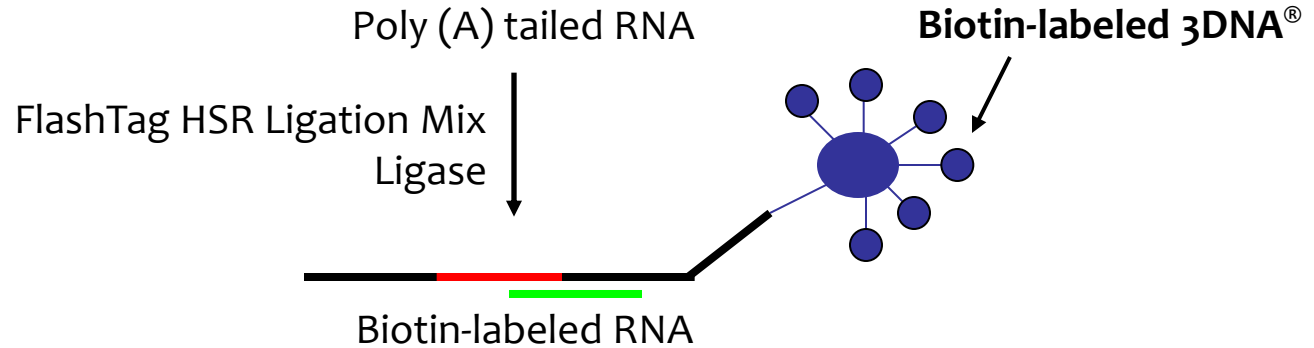
- FFPE RNAs are popular biological samples: outcome in patients is often known
- Service labs and researchers are currently successfully running FFPE samples on Affymetrix miRNA arrays

- Extract total RNA (which includes microRNA) with Applied Biosystems RecoverAll™ Total Nucleic Acid Isolation Kit for FFPE
- Label 100-1000ng FFPE total RNA with FlashTag HSR
- No changes to the FlashTag HSR procedure

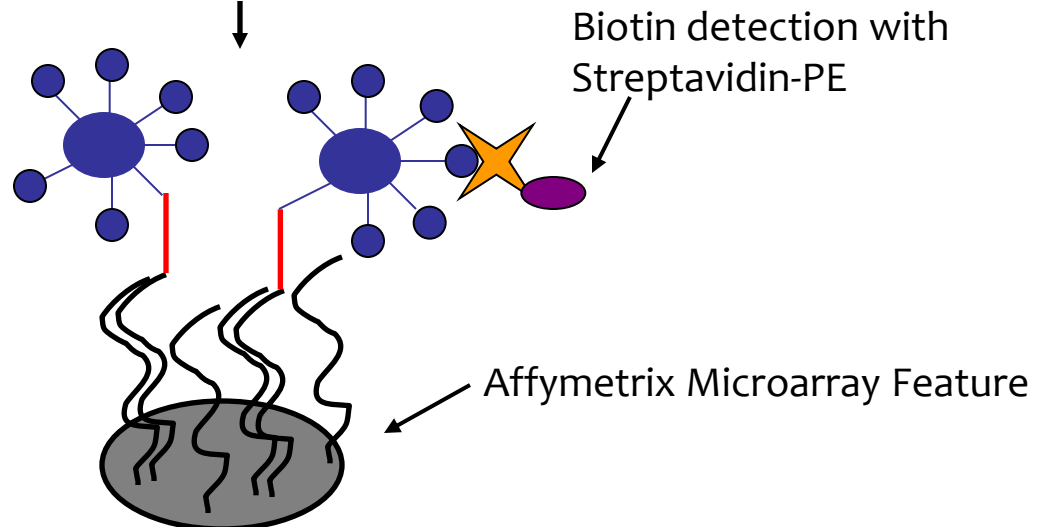
1 Poly (A) Tailing
(15 minutes)



2 Ligation
(30 minutes)

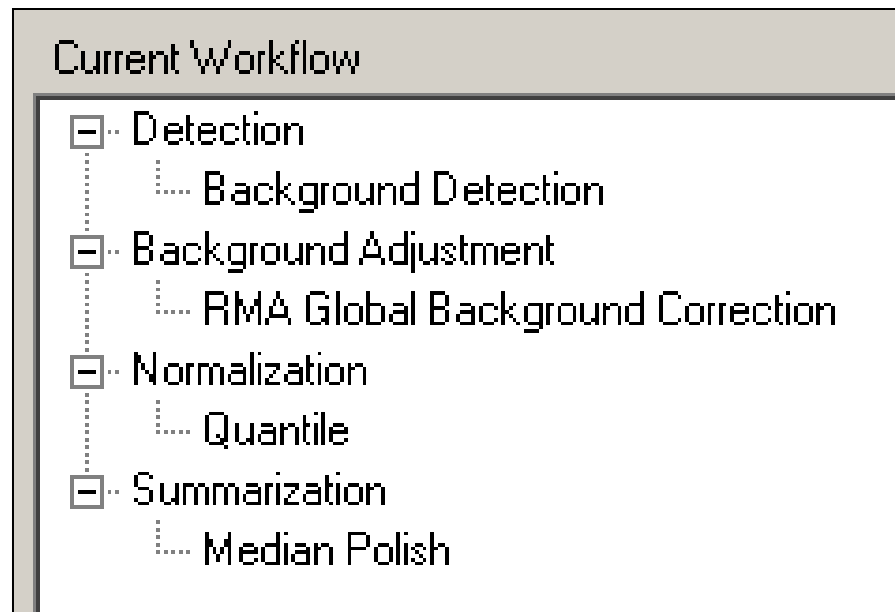


3 Analysis

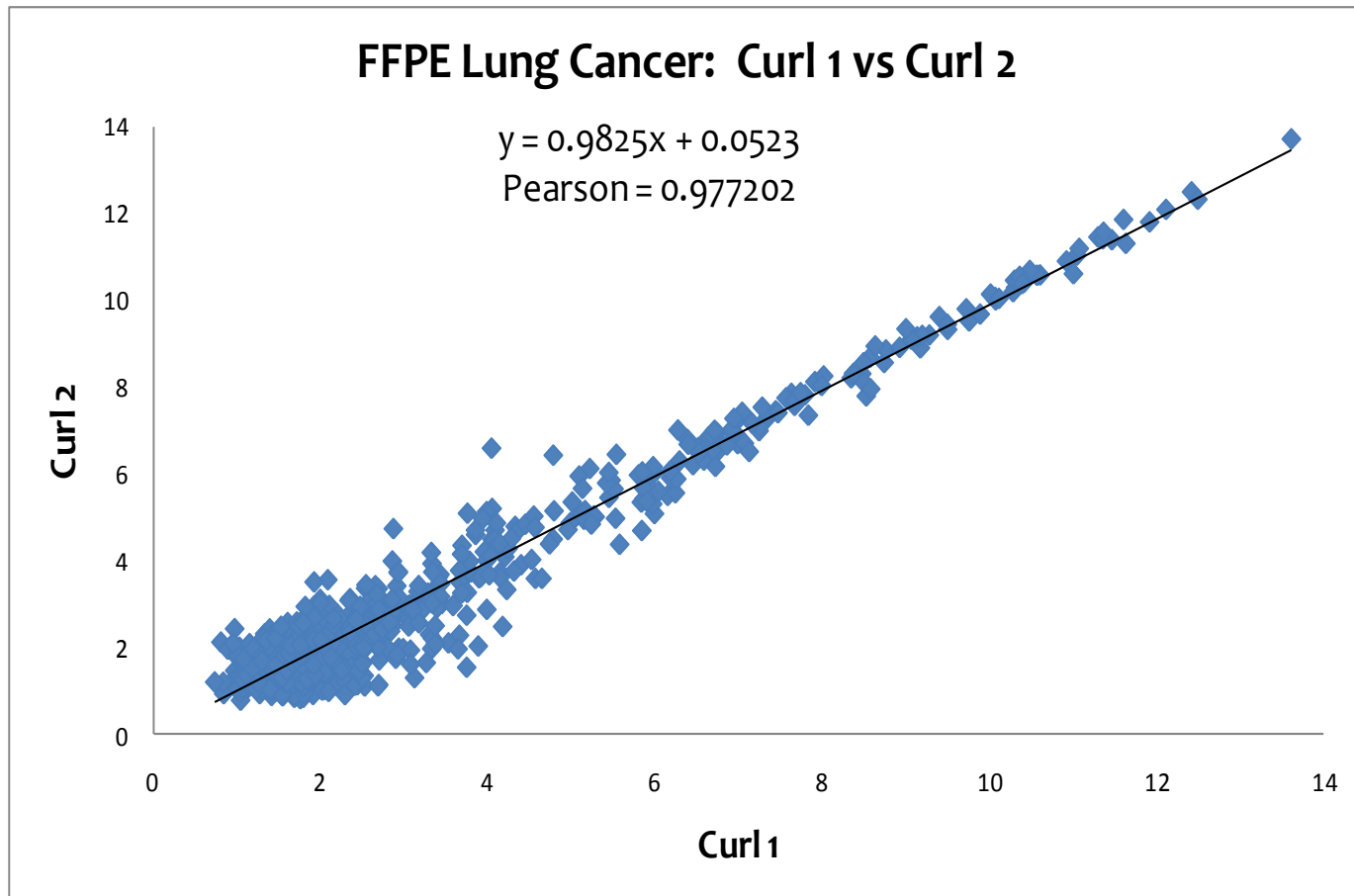


- Hybridization procedures are explained in the FlashTag HSR protocol
- Download the new miRNA Array library file from Affymetrix
 - The file name is: miRNA-1_0_2Xgain
- Hybridize 100µL to each array
- Hybridize at 48°C

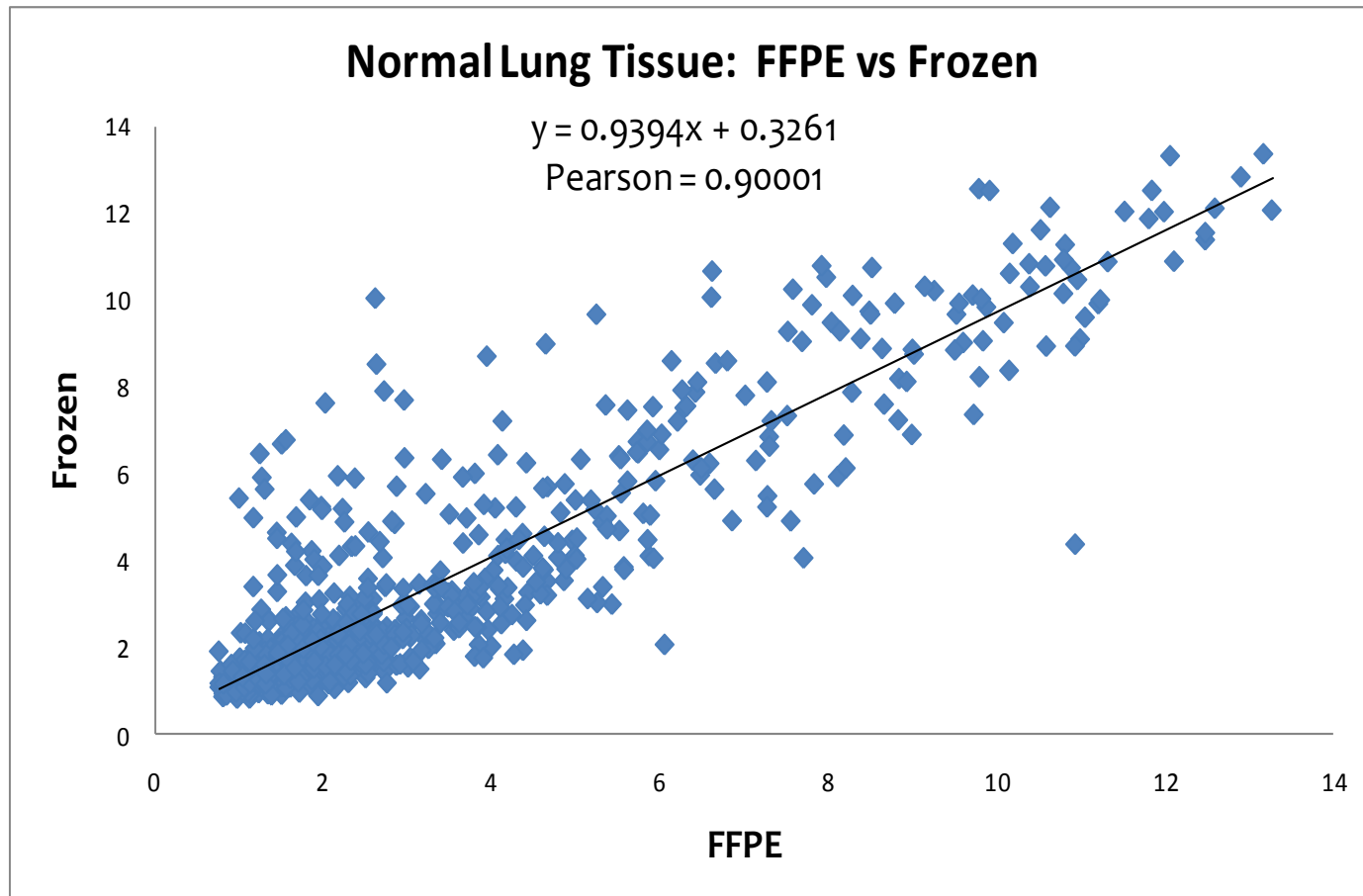
- miRNA QC Tool Software
 - Free, from Affymetrix
 - Easy to use
 - Recommended workflow:

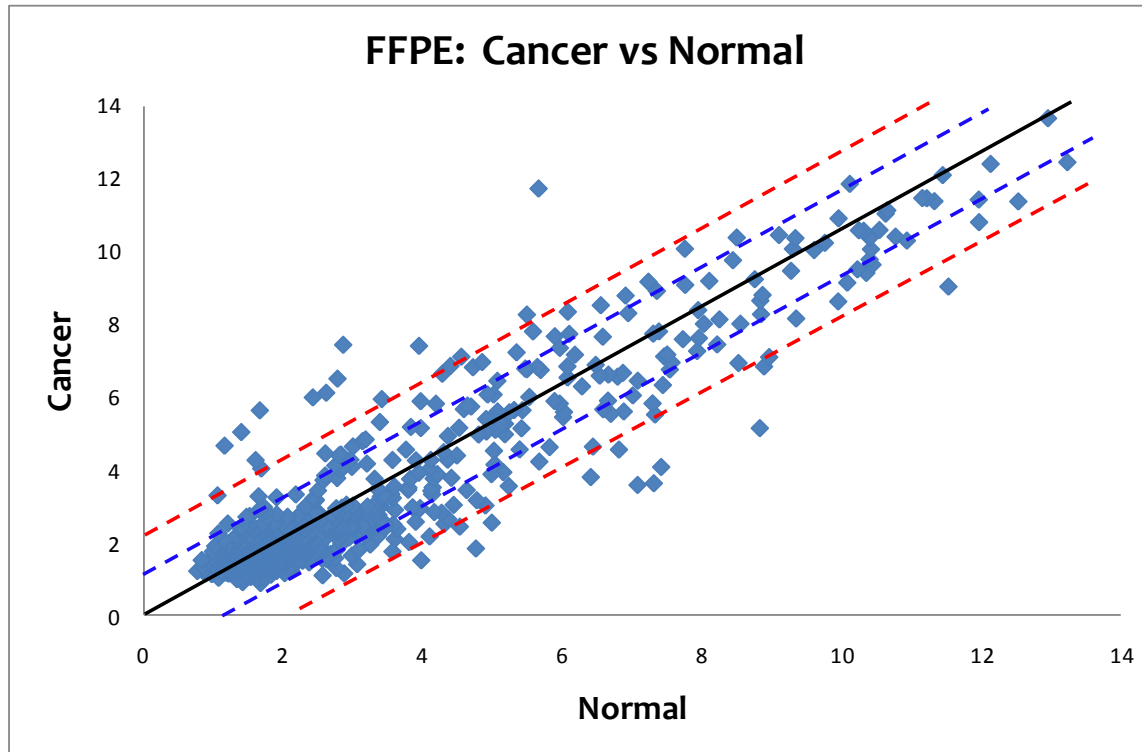


- Duplicate FFPE RNA extractions and FlashTag HSR labeling reactions (of 100ng FFPE total RNA) show excellent reproducibility



- 100ng FFPE total RNA has similar range of array signal intensities, and number of detected probesets, compared to 100ng frozen total RNA





Fold-Change	Number of microRNAs
≥ 4 -fold (+) -----	22
≥ 2 -fold (+) -----	81
≥ 4 -fold (-) -----	12
≥ 2 -fold (-) -----	56

- Interesting microRNAs:

- miR-210
- miR-146a
- miR-34c
- miR-17

Journal of Carcinogenesis 2010, 9:8
MicroRNAs and lung cancer: Biology and applications in diagnosis and prognosis

- Customer Service
 - Email: info@genisphere.com
 - Phone: 1-877-888-3362 or 215-996-3002
 - FAX: 1-877-329-3362 or 215-996-3070
 - Online Store: store.genisphere.com
- Technical Support
 - Email: techsupport@genisphere.com
 - Phone: 1-877-888-3362 or 215-996-304

Genisphere[®]

SIGNAL + SAMPLE AMPLIFICATION PRODUCTS