RNA Guidelines for miRNA Arrays

RNA Isolation

Any kit for purification of total RNA or LMW RNA will be compatible with FlashTag Biotin HSR. Elute or resuspend the RNA in nuclease-free water. Ensure that the purification method retains low molecular weight species. Some commercial products that have been tested successfully with FlashTag Biotin HSR include:

- Applied Biosystems: mirVana™ miRNA Isolation Kit
- Applied Biosystems: RecoverAll™ Total Nucleic Acid Isolation Kit for FFPE
- QIAGEN: miRNeasy Mini Kit
- Invitrogen: PureLink™ miRNA Isolation Kit
- Invitrogen: TRIzol® reagent (total RNA only) with additional overnight –20°C precipitation step during isopropanol precipitation[1]

Quantitation

To accurately determine the concentration of the RNA sample, Affymetrix recommends the use of the Quant-iT™ RiboGreen RNA Assay Kit (Invitrogen P/N R11490) or the NanoDrop® ND-1000 Spectrophotometer (NanoDrop Technologies).

RNA Input for FlashTag™ Biotin HSR

Table 1.2 describes general recommendations for RNA input for FlashTag Biotin HSR labeling. To maintain comparability to previous generation arrays, a minimum of 130 ng input is recommended for 100 format arrays.

Table 1.2
RNA Sample Input for FlashTag Biotin HSR Labeling for miRNA 100 Format Arrays (miRNA 3.0 and later designs)

total RNA	130 - 1000 ng total RNA