



Guideline for total RNA and genomic DNA sample submission

Total RNA Quantity Recommendation:

Source	Array Name	Type *	Input Amount	Rxn Vol*	Best to Submit	Ref Source	Reference Files
	miRNA		0.1ug - 1.0 ug	8.0 ul	>1.5 ug	Genisphere	FlashTag Biotin HSR for Affymetrix
Human	Gene 1.0, 1.1, 2.0, 2.1 ST, Transcriptome	WT	50 ng - 500 ng	3.0 ul	>200 ng/5.0 ul	Affymetrix	Affymetrix WT Plus Kits
Mouse		WT	50 ng - 500 ng	3.0 ul			
Rat		WT	50 ng - 500 ng	3.0 ul			
Human	Gene 1.0, 1.1, 2.0, 2.1 ST, Transcriptome	pico	5 ng - 50 ng	2.0 ul	>50 ng/5 ul	Affymetrix	Affymetrix pico kit
Mouse		pico	5 ng - 50 ng	2.0 ul			
Rat		pico	5 ng - 50 ng	2.0 ul			

Genomic DNA sample requirement:

Human	CytoScan HD	SNP	250 ng	5.0 ul	>350ng/7.0ul	Affymetrix	CytoScan HD array manual
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Please contact facility staff if you have any other questions or the array of your choice is not listed on this page.



Sample quality of total RNA and genomic DNA

DNase treatment:

It is generally recommended to use DNase treated RNA for GeneChip sample preparation

RNA Purity:

Sample must be free of contaminating proteins and other cellular material, organic chemicals.

A260:A280 ratio > 1.8

lower ratio often indicates protein contamination

A260:A230 ratio > 1.8

lower ratio often indicates some chemical contamination. Depending upon the nature of contamination, it could fail the sample preparation.

RNA Integrity Number (RIN):

RIN > 7.0 for IVT arrays, > 6.0 for WT arrays

Agilent 2100 Bioanalyzer

Genomic DNA sample quality requirement:

DNA Purity:

Sample must be free of contaminating proteins and other cellular material, organic chemicals.

A260:A280 ratio > 1.7

lower ratio often indicates protein contamination

A260:A230 ratio > 1.7

lower ratio often indicates some chemical contamination. Depending upon the nature of contamination, it could fail the sample preparation.

DNA Integrity:

clear single band well over 10k DNA ladder (1% agarose gel electrophoresis with 50 ng to 100 ng DNA)

