# TOME TOMET T

### **Microarray Facility**, The Centre for Applied Genomics, The Hospital for Sick Children

Room 13.9410M, 13<sup>th</sup> Floor, 686 Bay St., Toronto, Ontario M5G 0A4 *Fax: 416-813-8319; Phone: 416-813-5063, http://www.tcaq.ca* 



# 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,	WT	50 ng - 500 ng	3.0 ul			
Mouse	2.1 ST,	WT	50 ng - 500 ng	3.0 ul	>200 ng/5.0 ul	Affymetrix	Affymetrix WT Plus Kits
Rat	Transcriptome	WT	50 ng - 500 ng	3.0 ul			
Human	Gene 1.0, 1.1, 2.0,	pico	5 ng - 50 ng	2.0 ul			
Mouse	2.1 ST,	pico	5 ng - 50 ng	2.0 ul	>50 ng/5 ul	Affymetrix	Affymetrix pico kit
Rat	Transcriptome	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

Please contact facility staff if you have any other questions or the array of your choice is not listed on this page.

### Microarray Facility, The Centre for Applied Genomics, The Hospital for Sick Children

Room 13.9410M, 13<sup>th</sup> Floor, 686 Bay St., Toronto, Ontario M5G 0A4 *Fax: 416-813-8319; Phone: 416-813-5063, http://www.tcag.ca* 



# 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

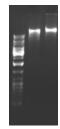
A260:A230 ratio > 1.7 lower ratio often indicates some chemical contamination. Depending

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)



Last update: June 2022