

Agilent 2100 Bioanalyzer System

Sample Preparation Instructions

Sample

- Aliquot each sample into a separate 1.5mL Tube
- Concentration = variable (not to exceed 200ng/ul)
- Volume = 3ul

Tube labels must include:

- Sample Name
- Concentration
- Date (MM-DD-YY)

The label on your tube(s) and in this Order Form must be the same. Please indicate in the e-mail if you would like GBCF staff to help evaluate the results for you in any particular context (e.g. RNAseq, sizing, etc).

General Sample Preparation Guidelines

To ensure successful results, the sample must be of sufficient purity and appropriate concentration. The GBCF recommends using only purified products. Purity of the sample is very important for accurate size determination; high salt concentration and enzymes is known to affect the mobility of the sample. Selecting the appropriate kit is concentration dependent. See the Assay Kit table below for sample type and concentration range. The

GBCF recommends using a spectrometer, such as the Nanodrop, to determine sample concentration prior to submission.

2100 Bioanalyzer Chips and Assay Kits

The 2100 Bioanalyzer DNA/RNA kits are designed to meet the needs of most sample types. Genomic DNA is not supported. DNA Kits are designed to accommodate fragmented DNA (i.e. cDNA, PCR products, and restriction-digested DNA). RNA Kits are designed for analysis of Total RNA and mRNA from eukaryote, prokaryotes, and plants. Typically, kits process up to 12* samples per run. (*11 for low input)

DNA Assay Kits	Conc. Range ng/ul	Size Range (bp)
DNA 7500	1 - 50	100 - 7500
DNA High-Sensitivity*	0.005 – 0.5	50 - 7000

RNA Assay Kits	Total RNA		mRNA	
	Conc. Range ng/ul	Size Range (bp)	Conc. Range ng/ul	Size Range (bp)
RNA 6000 Nano	5 – 200	50 - 6000	25 – 250	50 - 6000
RNA 6000 Pico*	0.05 – 5	50 - 6000	0.025 – 5	50 - 6000