

## ACRF Centre for Cancer Genomic Medicine

ACRF Centre for Cancer Genomic Medicine is one of the four centres forming the MHTP Medical Genomics Facility:

- The Gandel Charitable Trust Sequencing Centre
- ACRF Centre for Cancer Genomic Medicine
- MHTP High Content Screening Centre
- MHTP Microarray Centre

Located at the Monash Health Translation Precinct (MHTP) in Victoria, we are a not-for-profit facility using state-of-the-art technologies to service research Institutes throughout Australia. We maintain an excellent reputation for the provision of the highest quality genomic data and comprehensive client support.

The Centre operates a Next Generation Sequencing (NGS) service using the latest Illumina HiSeq 1500 and Life Technologies Ion PGM and Proton systems. Complementary services include RNA and DNA quantitation utilising the Agilent Bioanalyzer and DNA Shearing using the Covaris system.

### Contact Us

Email     medicalgenomics@monash.edu  
Web        <http://mhtpmedicalgenomics.org.au>  
Tel         +61 3 9902 4790 or +61 3 9594 3576

## Bioanalyzer RNA and DNA Quantitation

The Agilent 2100 Bioanalyzer system automatically performs the multiple steps of gel-based electrophoresis, replacing the need to run agarose gels to separate and quantitate RNA or DNA samples.

Using Caliper Life Sciences' LabChip technology, each chip contains a set of interconnected microchannels for nucleic acid separation and internal standards are used to accurately size and quantitate RNA and DNA.

Resultant data is conveniently available as a report (pdf) containing a simulated gel image, electropherogram and tabulated results.

### Major benefits include:

- Reduced time-to-result, hands-on-time, reagent usage and sample consumption
- Accurate assessment of RNA purity for gene expression analysis via RT-PCR or microarray
- Automated sizing and quantitation of PCR, RT-PCR and restriction digests
- DNA sample QC for next generation

For further information on the Agilent 2100 Bioanalyzer visit <http://www.genomics.agilent.com>



| Specifications - Bioanalyzer Kit  | Analysis range                                   | Samples per chip | Volume required |
|-----------------------------------|--|------------------|-----------------|
| RNA 6000 Nano                     | Total RNA: 5–500 ng/μl<br>mRNA: 25–250 ng/μl     | 12               | 2 μl            |
| RNA 6000 Pico                     | Total RNA: 50–5000 pg/μl<br>mRNA: 250–5000 pg/μl | 11               | 2 μl            |
| Small RNA (6–150 nt)              | 50–2000 pg/μl                                    | 11               | 2 μl            |
| DNA 1000 (25–1000 bp)             | 0.5–50 ng/μl                                     | 12               | 2 μl            |
| High Sensitivity DNA (50–7000 bp) | 5–500 pg/μl                                      | 11               | 2 μl            |

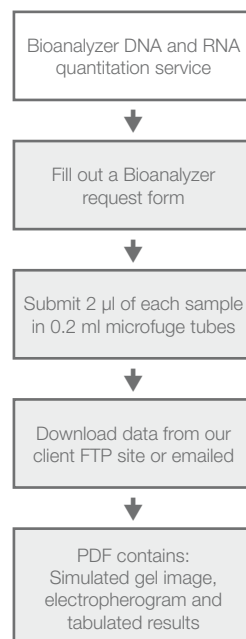
### Sample submission

Simply fill out a Bioanalyzer request form (available on our website) and provide 2 μl of each sample within the concentration ranges outlined in the table above.

Please contact the Facility to arrange a suitable time for you to deliver your samples.

### Data retrieval

Data is available from our FTP site, usually within 24–48 hours of sample receipt.



#### MHTP Medical Genomics Facility

c/o Monash Institute of Medical Research  
27-31 Wright Street,  
Clayton, VIC 3168 Australia

Tel +61 3 9902 4790 or +61 3 9594 3576  
Fax +61 3 9594 7111

Web <http://mhtpmedicalgenomics.org.au>  
Email [medicalgenomics@monash.edu](mailto:medicalgenomics@monash.edu)