



## 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](mailto:medicalgenomics@monash.edu)  
Web <http://mhtpmedicalgenomics.org.au>  
Tel +61 3 9902 4790 or +61 3 9594 3576

## Covaris Shearing

The Covaris is the only system that successfully and reproducibly shears DNA in the size range of 100–5000+ bp, eliminating the need for multiple shearing technologies. The process also maintains DNA integrity, as shearing is carried out under temperature-controlled conditions in a closed vessel that eliminates the risk of cross-contamination.

The Covaris Adaptive Focused Acoustics™ (AFA) process uses acoustic energy wave packets from a dish-shaped transducer to reproducibly shear DNA fragments to tight size distribution ranges. The Covaris technology enables controlled, quantitative and standardised sample preparation for various applications, including shearing DNA fragments for next generation sequencing library preparation.

### Major benefits include:

- Eliminates the risk of G/C bias, common with enzymatic shearing
- Highly reproducible
- Versatile, 100–5000+ bp size selection
- Precise and tight fragment size distribution
- Fast and easy to use

For further information on the Covaris system visit <http://www.covarisinc.com/applications.htm>





### Sample submission

Simply fill out a Covaris request form (available on our website) and contact the Centre to determine the optimum sample amount and operating conditions for your project.

Operating conditions include:

Duty cycle

Intensity

Cycles per burst

Processing time (sec)

Fragment size range

Sample vessel for DNA and RNA - Snap-Cap microTube with AFA fiber and pre-split

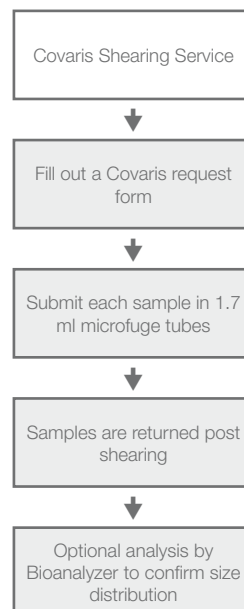
Teflon/silicone/Teflon Septa

Part Number 520045

Sample vessel for chromatin shearing - 1.0 ml Covaris TC12x12 AFA tubes

Part Number 520081

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



**Monash Health Translation Precinct**

c/o Monash Institute of Medical Research

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