

Submission of samples for preparation of Chromium Fixed RNA libraries

The CGR cannot guarantee good results from samples that do not meet the requirements set out in this document.

The 10x Genomics Chromium Fixed RNA Profiling workflow requires a suspension of fixed cells or fixed nuclei as input. The demonstrated protocol [Fixation of Cells & Nuclei for Chromium Fixed RNA Profiling](#) should be followed to the letter prior to submitting the samples to the CGR. Collaborators will need to purchase the appropriate Chromium Next GEM Single Cell Fixed RNA Sample Preparation Kit/s to suit the number of samples they plan to submit, as this is not included in quotes provided by the CGR for this workflow.

To maximise sample quality, we recommend that:

- Cells/nuclei are treated as gently as possible throughout the extraction process. This includes gentle pipetting (possibly via the use of wide-bore pipette tips) and the use of low centrifugation speeds.
- Sample preparation times are kept to a minimum.
- Cell size is a consideration. Large cells can block the microfluidic channels (anything >30 microns is unlikely to perform well).

Please note that cell suspensions need to be resuspended following the Post-Storage Processing stage of the aforementioned protocol on the morning of submission. Cells should also be counted following resuspension and CGR staff should be advised of the concentration of cells in each sample at the point of submission.

Samples should be submitted to the CGR no later than 12 pm. If your samples cannot be submitted by this time, please contact the CGR lab team as early as possible on **0151 795 4551** to advise them of the expected submission time.

If you are unable to meet the stated requirements, please contact us at CGR_Lab@liverpool.ac.uk and we will be happy to offer further advice.

Complying with the Human Tissue Act

If you are submitting human samples, your project will be governed by the Human Tissue Act. Under this legislation, there is a strictly limited period of time that we are allowed to store human material. We request that you retrieve any remaining samples within ~3 days of submission. If you do not collect remaining material within 10 days, we will be forced to destroy this material and this will incur additional fees.

We will require you to fill out some additional documentation before we can take receipt of any human material. If you have not already received this documentation, please contact us at CGR.Enquiries@liverpool.ac.uk.