

## CFG – Cell Suspension Delivery Guideline

The single-cell experiment can be arranged for any day of the working week except Friday, **samples must be brought no later than 2:00 p.m.** The specific date of the experiment must be agreed at least a week in advance.

**CFGenomics does not provide dissociation of cells/nuclei from tissues** and requires customers to prepare the single-cell/single-nucleus suspension themselves.

Recommendations and manuals for cell dissociation can be found on the manufacturer's website <https://www.10xgenomics.com/support/single-cell-gene-expression/documentation/steps/sample-prep> . Please note that dissociation may not be as trivial as it may seem at first glance, so we recommend first trying and optimizing the preparation of the cell suspension so that the output meets the parameters described below.

In the day of experiment, customers are requested to bring the cell suspension in the recommended buffer on ice with measured concentration within the range 400 – 2000 cells/ $\mu$ l (**optimal concentration is 700 to 1200 cells/ $\mu$ l**). We can provide both a Luna automated cell counter and a Bürker counting chamber for concentration measurement/re-measurement, but we insist that customers determine the concentration by themselves. The minimum volume of cell suspension is 100  $\mu$ l, but **we suggest bringing at least 1 ml.**

**Cell viability should be > 90% with no visible debris and minimal amount of cell-free RNA and cell clumps present.** Therefore, we recommend to spin and properly wash the cells with the recommended buffer several times followed by filtering the cells using an appropriate cell strainer before the final counting.

Regarding the **cell-suspension buffer**, it is recommended to use **1X PBS (calcium and magnesium-free) containing 0.04% - 1% weight/volume BSA or up to 10% of FBS (not cell culture media)**. Please bring an aliquot of cell suspension buffer with you just in case.

For correct handling of the cells, it is advantageous to read and follow the original manual from the manufacturer:

[https://cdn.10xgenomics.com/image/upload/v1686678481/support-documents/CG00053\\_Handbook\\_CellPreparation\\_SingleCellProtocols\\_Rev\\_D.pdf](https://cdn.10xgenomics.com/image/upload/v1686678481/support-documents/CG00053_Handbook_CellPreparation_SingleCellProtocols_Rev_D.pdf)