

Single cell applications. Sample preparation guidelines

Please contact our NGS Core before to start your single cell experiment (info@igatechnology.com) in order to determine the best approach for your particular cell type and to coordinate the laboratory activity.

10x Genomics Single Cell RNA-Seq. Input Requirements.

Sample Type

Frozen cell suspension or Methanol-fixed cells submitted in duplicate.

It is possible to receive and process live cells in culture, transported and hand-delivered directly by customers who can reach our laboratories in a time compatible with transport and processing in the same day.

This option must be discussed and planned with us.

When the **CellPlex Multiplexing Solution** (https://support.10xgenomics.com/single-cell-gene-expression/software/pipelines/latest/what-is-cellplex) can be applied, only live or frozen cells could be accepted.

Recommended Amount

5x10⁵ to 1x10⁶ cells in 1 ml per cryotube

Minimum Amount

100.000 cells in 0.5 mL per cryotube

Freezing Buffer

Cryopreservation media (e.g. cell growth media + 20% FBS + 10% DMSO; or 90% FBS + 10% DMSO).

For details and suggestions regarding tissue dissociation, cells isolation, freezing or methanol fixation, refer to 10X Genomics Sample Prep Demonstrated protocols and visit https://support.10xgenomics.com/single-cell-gene-expression/sample-prep website or contact 10X Genomics Technical Support (support@10xgenomics.com).

Shipping

Before submitting your samples, contact us to discuss the best approach for your particular cell type.

The cryotubes must have, on the vial top, a clear and permanent sign (or a thin label) with a **progressive number** corresponding to information specified in the **Sample Spreadsheet**.

Ship samples in **Dry ice overnight**. Organize the packaging in a way to avoid damaging and dispersion during the shipment: place tubes and plates in smaller plastic bags or boxes.

It is **MANDATORY** to send us the compiled **Sample Spreadsheet**, both with the shipped parcel and via e-mail. To be able to properly track and safeguard your samples send us the **Tracking Number** via e-mail.