**SORTING EXPERIMENT PROTOCOL**

*This form must be filled out and received by the CMtO Facility at the start of the project or at least a* ***week*** *before the actual Sort appointment*

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of Experiment: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Phone Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Laboratory/Principal Investigator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

FOAPAL # (19 digits) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Describe Your Experiment:**

|  |  |
| --- | --- |
| Cell type |  |
| Source (human, mouse, etc.) |  |
| Treatment of cells (e.g., transfected, cultured, pre-enriched etc**.) If transfected, please indicate vector** |  |
| Short description of the project. |  |
| Is this project approved for cell sorting by DRS (Division of Research Safety) |  |
| Approximate cell size (If known) |  |
| Temperature control during SORT |  |
| Staining Panel: e.g., antibody/fluorochrome, dyes, fluorescent proteins |  |
| Cell numbers (e.g. total number of cells to be sorted, number of samples) |  |
| Number of Sort Fraction(s) 5mL or 1.5mL Tubes |  |

**Note that all tubes, media and control samples need to be sterile for a sterile sort!**

* Cell concentration should be 1 to 5 x 106 cells per mL, however, if total cell number is low concentrate and resuspend cells in 0.5 to 1mL.
* Bring pre-coated 5 mL tubes (you can also pick up from the CMtO facility-best are sterile glass tubes-presoak with extraction/sort buffer (0.5 to 1mL in each tube depending on cell number to be collected in each-higher the number more the volume), next choice polypropylene one – in one tube we can collect 300K cells)
* Bring extra medium (10-20 mL) in a 15-50 mL in sterile falcon tubes for extraction/sorting and dilution if needed.
* Bring control cells, unstained cells, or cells stained with single color controls and multicolor test samples at least for the first few times and test sorts until the compensation and sort parameters are established.
* Bring single color tubes for compensation set-up for multi-color experiments.
* Due to transportation issues, we prefer sorting in to 5mL glass tubes or 1.5mL Eppendorf Tubes.
* Have you run these samples in an analyzer and if you have please send your unlabeled and labeled sample pdf data from analyzer?
* All sorts for single cell/nuclei RNA, ATAC, Multiome and bulk sequencing requires prior analysis of samples in an analyzer (enables correct population to sort) and few test sorts before the actual sorting for sequencing. This must be done several weeks before the actual sorting of samples for sequencing.
* All samples must be filtered through 30 or 40 micron filters and if excessive debris present at lower than 2 micron, filtering the sample through 2-3 micron filter and taking the supernatant is required.
* Please write to sivaguru@illinois.edu and kjans01s@illinois.edu for an appointment or any queries.