Analytical Cytometry Core

Cell Sorting Guidelines

1. The optimum sorting concentration
    a. for the MoFlo and the 100-micron nozzle tip is no more than 8 million total cells/ml.
    b. for the Aria sorters:
        i. 70 micron tip: between 8-10million cells/ml
        ii. 85 micron tip: no more than 5million cells/ml
2. Sorting samples should be resuspended in media with low serum (1-2%) , 1X PBS, or other buffer cells prefer.
3. The final pellet of the controls and the sort sample(s) need to be resuspended in the same buffer.
4. For the controls, we need at least 200,000 cells in 500ul final volume.
5. Negative controls can be unstained cells, isotype controls, secondary reagent only, or FMO depending on your application.
6. For multicolor staining, please provide single color compensation controls (no viability dyes) and a completely unstained aliquot of your sorting cells.
7. For sterile sorts, all samples (controls and sorting samples) need to be treated in a sterile fashion.
8. For 1 or 2 way bulk sorting, sorting can be performed into 15ml conical centrifuge tubes with 2-3mls collection media. Also, 12X75mm culture tubes (with 1-2ml collection media) or 1.5ml microfuge tubes (with 200-300ul collection media) can be used.
9. For 3 or 4 way bulk sorting, we need to sort into either 12X75mm culture tube or 1.5ml microfuge tubes (same volumes as in #7)with 1-2mls
10. Collection media can be complete media or media with 20% serum.
11. For plate sorting, place appropriate complete media in each well.
12. Appointments should be scheduled at least 1 week in advance. Some weeks are busier than others, so we cannot guarantee that a slot will be available.
13. Documentation of noncompetency needs to accompany any samples that are transduced with lentiviral vectors. The sort will not be performed if the documentation is not provided.