



# BD FACSMelody™ Cell Sorter

Simple cell isolation for genomics



Whether you choose one rare cell or a whole population, the BD FACSMelody™ makes it easy to sort as part of your genomics workflow.

In conventional bulk analyses, information about a cell's proteome or transcriptome is captured as part of the overall population's average, restricting the ability to properly characterize individual cells or a population of rare cells as their unique signatures would be lost.

The BD FACSMelody™ cell sorter allows you to select specific cells for genomic analysis, so that you're collecting data from cells of interest. After you identify the gene expression of sorted cells, you can correlate that information to the protein expression easily captured while sorting on the BD FACSMelody system.



## The BD FACSMelody cell sorter makes sorting easy

Selecting targeted cells and discarding dead, dying or unwanted cells is now an easy process achievable by any lab. The BD FACSMelody cell sorter brings the power of flow cytometry and sorting to more researchers, enabling deeper scientific insights, increased lab efficiency and cost savings.

Incorporating technology exclusive to BD, the BD FACSMelody cell sorter is developed on powerful cell isolation technology, refined by BD for more than 40 years.

**Easy to use:** The BD FACSMelody simplifies the sorting workflow with smart automation, enabled by the new, easy-to-use, BD FACSMelody™ software. Learning to operate the BD FACSMelody is easy, regardless of a user's familiarity with flow cytometry. On-screen instructions and tips are displayed when you need them, and preset data tools save you clicks and time. The system has behind-the-scenes instrument management that monitors sort progress and controls the system for the optimal sort.

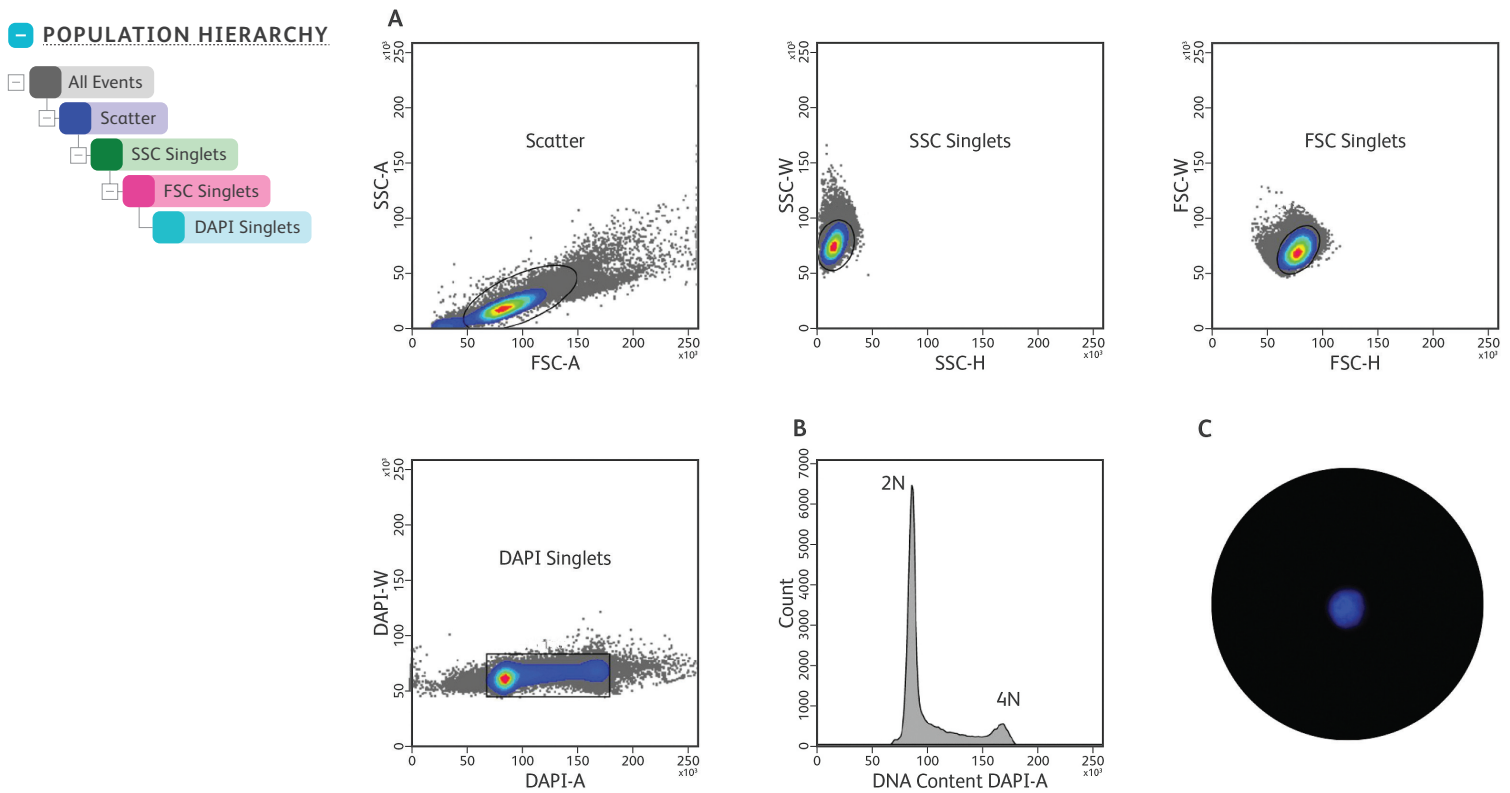
**High performance:** A complete system of reagents, software and hardware work together to detect and sort low-density cell markers and rare cells. The system delivers reproducible results, enables sorting into tubes or a range of standard plates and is available with an optional custom class II biological safety cabinet, designed to meet personnel and product protection standards.

**More data with more utility:** The system captures protein expression information and the final location for each event (for example, well location in a 96-well plate), allowing you to precisely correlate information about the proteins with your genomics data. Combine that with exclusion of cells which don't meet the target profile for your experiment, and you can ensure that your data comes from cells of interest, allowing you to study heterogeneity in cell samples.

**Service and support:** Rely on highly responsive field service support with diverse expertise in flow cytometry and genomics applications from BD. Hands-on training is also available for the BD FACSMelody system. Training includes flow cytometry theory, but focuses on the practical skills needed to obtain the highest quality cells for downstream workflows.



Allow the BD FACSMelody to help you identify and isolate the cells in your sample, and discover the difference it can make in your research.



#### Single-cell deposition

HEK-293 cells were fixed with 70% ethanol and stained with 0.5 µg/mL of DAPI. (A) Population hierarchy. Area, height and width parameters for side scatter, forward scatter and DAPI were sequentially used to exclude doublets and cell aggregates. The gating strategy used in this experiment may have underestimated or excluded mitotic figures. (B) DNA content analysis. Cells within the DAPI singlet gate showed a DNA content between 2N and 4N, thus confirming exclusion of >4N doublets or aggregates. (C) Post-sort validation of single-cell deposition. Cells within the DAPI singlet gate were sorted into three 96-multiwell plates with 99.7% single cell deposition efficiency. Microscopy was used to confirm the presence of one cell per well. A representative image of a well containing one cell is shown.

Supported Assays		
Cell Application	Detection Method	BD Kits and Reagents
Single cells	Forward and side scattered light	Parameter automatically captured by the instrument
Nuclear stain, cell cycle, cell viability	Propidium Iodide, DAPI	BD Cycletest™ Plus DNA Reagent kit, BD Pharmingen™ DAPI Solution
Phenotype markers	Fluorescent cell labelling	BD Horizon Brilliant™ Dyes, Traditional BD dyes
Reporter gene expression	GFP, YFP, mCherry	N/A

Class 1 Laser Product.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

BD Life Sciences, Milpitas, CA 95035, U.S.

[bdbiosciences.com](http://bdbiosciences.com)

