Polaris System

For more information about the Polaris™ system, go to fluidigm.com/products/polaris.

v1.2.1 Enhancements

Enhancement to the Prime workflow

Bead Mix is added to the integrated fluidic circuit (IFC) only after passing initialization, which decouples bead loading from other prime steps. This change relieves the bead-loading time constraints and simplifies the IFC setup.

Multiple cell selection improvements

- Ability to set a lower and higher threshold per channel
- Ability to change thresholds and exposure time at any time during cell selection
- Ability to change fluorescence thresholds before and during cell selection using the histogram
- Ability to select 2 different cell populations within a single IFC
- Ability to set different selection pressures, including a selection pressure mode of Low for large or delicate cells

Improved workflow options

Time Course. This is a workflow with customizable dosing durations for up to 6 groups of 8 cells per group.

Dose and Feed. This is a workflow with customizable combinations of dosing and feeding durations.

No Treatment. This is a workflow without any dosing.

Multiple Stain and Wash improvements

- Ability to stain with 2 separate reagents
- User-definable channels/exposure settings for imaging
- Customizable stain duration time for each reagent

Multiple hemocytometer improvements

- Display of left and right side of histogram

- Export of the histogram data
- Simultaneous viewing and imaging of multiple channels

Multiple data export Improvements

- Ability to clone the settings of a previous experiment and run the experiment again
- Ability to display a user-friendly summary report of the run in Microsoft® Excel® for the Results step
- Ability to display animated GIF images for the Cell Selection step
- Ability to display images for the Hemocytometer step

v1.2.1 Bug Fixes

- An optional Hemocytometer step is now included during the run before the Cell Selection step. The hemocytometer can still be accessed as a utility function.
- The addition of a custom image-contrast feature now enables cells to be differentiated easily from their bead beds.
- Improved cell selection accuracy now resolves selection issues involving sites that are empty or that contain doublets, small, or dim cells.
- Improved export of cell images now makes it easier to view all cells in each channel. This includes stitching all 48 cell images into one image and using the original raw image of the cell for users to analyze on their own.
- Improved washing during the Post Stain/Wash step now eliminates sample harvest failures due to suboptimal washing.
- Multiple IFC improvements now maintain volume throughout the various workflow steps for 2 specific Valve Prime Reagent-containing inlets.
- The addition of an explicit initialization procedure during the Prime step now ensures proper initialization of the IFC.

For technical support visit fluidigm.com/support.

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