



Quick Reference Card

Muse® Ki67 Proliferation Kit MCH100114

To determine the percentage of proliferating cells based on Ki67 expression

For Research Use Only; not for use in diagnostic procedures.

Storage Conditions

Store the Muse® Hu Ki67-PE, Muse® Hu IgG1-PE, 5X Assay Buffer, and Permeabilization Buffer at 2° to 8°C, protected from light. Store the 5X Fixation Solution at room temperature.

Kit Components

- Muse® Hu Ki67-PE Antibody (Part No. 4700-1667, 100 tests/vial)
- Muse® Hu IgG1-PE Antibody (Part No. 4700-1669, 100 tests/vial)
- 5X Assay Buffer (Part No. CS202124, 50 mL/vial)
- Permeabilization Buffer (Part No. CS202125, 10 mL/vial)
- 5X Fixation Solution (Part No. 4300-0340, two 3-mL vials)

Materials Recommended

- Muse® Cell Analyzer
- Cell suspension (2.5 x 10⁴ to 5 x 10⁵ cells/mL or 5 x 10³ to 1 x 10⁵ cells/sample)
- 1X Phosphate-buffered saline (PBS)
- Micropipettors
- Disposable micropipettor tips
- Microcentrifuge tubes with screw caps, 1.5 mL (VWR Catalog No. 16466-030, or equivalent)
- 96 well microtiter plates (optional)
- Centrifuge
- Vortex mixer

Assay Protocol

Culture cells, including for positive and negative controls:

Wash cell samples once with PBS, then transfer 5 x 10³ to 1 x 10⁵ cells per sample into each tube.



Prepare 1X Fixation Solution (50 µL per test) and 1X Assay Buffer (500 µL per test).



Add 50 µL of 1X Fixation Solution to each tube. Mix and incubate for 15 minutes at room temperature.



Add 150 µL of 1X Assay Buffer, centrifuge, and remove supernatant.



Add 100 µL of Permeabilization Solution to each tube. Mix and incubate for 15 minutes at room temperature.



Add 100 µL of 1X Assay Buffer, centrifuge, and remove supernatant.



Add 50 µL of 1X Assay Buffer to each tube. Mix and incubate for 15 minutes at room temperature.



Add 10 µL of either Muse® Hu IgG1-PE or Muse® Hu Ki67-PE Antibody to each tube. Mix and incubate for 30 minutes at room temperature.



Add 150 µL of 1X Assay Buffer to each tube and run on the Muse® Cell Analyzer.

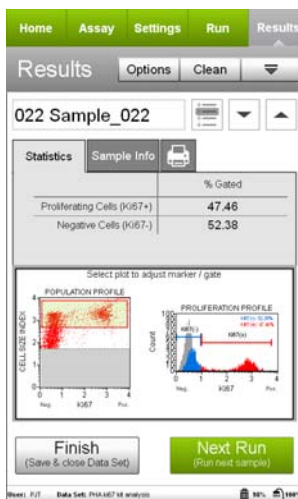
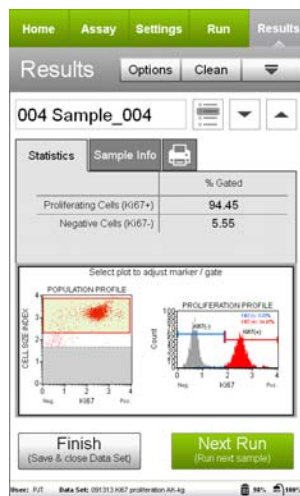
NOTE: A detailed kit user's guide can be found at www.millipore.com/muse (search by Cat. No. MCH100114)

Expected Results

The figures below show examples of results obtained with the Muse® Ki67 Cell Proliferation Kit.

Events in the histogram are as follows:

- Proliferating cells (Ki67+)
- Negative cells (Ki67-)



Figures A and B. Example Data: Results obtained with the Muse® Ki67 Cell Proliferation Kit. Figure A shows results for healthy proliferating Jurkat cells (red) with an optional histogram overlay of the isotype control (grey). Figure B shows human PBMC cells stimulated with PHA (red and blue) with an optional histogram overlay of the isotype control (grey). The statistics show population percentages in the stained sample. The dot plot shows Ki67 staining vs Cell Size Index and the histogram shows Ki67 staining.

For more information, refer to the comprehensive user's guide, which can be found at www.millipore.com/muse (search for Catalog Code, MCH100114).

Related Products

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Description	Catalog No.
Muse® System Check Kit	MCH100101
Muse® Count & Viability Kit (100T)	MCH100102
Muse® Annexin V & Dead Cell Kit	MCH100105
Muse® Human Lymphocyte CD69 Kit	MIM100104
Muse® Human Lymphocyte CD25 Kit	MIM100105



The latest version of Muse® software, which includes all assay modules, as well as the kit user's guide, can be found at www.millipore.com/muse.