

Quick Reference Card

Muse® Bcl-2 Activation Dual Detection Kit MCH200105

To detect the extent of Bcl-2 pathway activation by measuring Bcl-2 phosphorylation relative to the total Bcl-2 expression in any given cell population For Research Use Only. Not for use in diagnostic procedures.

Storage Conditions

All reagents must be stored at 2-8°C.

Materials Recommended

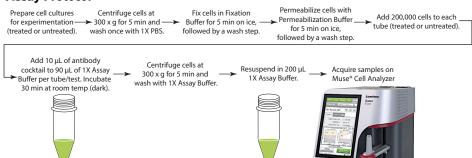
- Guava® Muse® Cell Analyzer
- Test tubes for sample prep and storage
- Tissue culture reagents, i.e., HBSS, PBS w/o Ca²⁺ or Mg²⁺, cell dislodging buffers, etc.
- Micropipettes and tips
- Table top centrifuge
- Mechanical vortex
- Deionized water
- Cells of interest in suspension

 Microcentrifuge tubes with screw caps, 1.5 mL (VWR, Catalogue No. 16466-030, or equivalent)

Kit Components

- 20X Anti-phospho-Bcl-2 (Ser70), Alexa Fluor™ 555: (Part No. CS208208), 250 µL
- 20X Anti-Bcl-2, PECy5: (Part No. CS208209), 300 μL
- 5X Assay Buffer: (Part No. CS202124),
 55 mL
- Fixation Buffer: (Part No. CS202122), 13 mL
- 1X Permeabilization Buffer: (Part No. CS203284), 14 mL

Assay Protocol



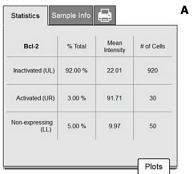
NOTE: A detailed kit user's guide can be found at www.luminexcorp.com/flowkits.

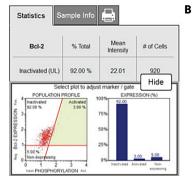
Expected Results

Results are obtained using healthy Jurkat cells exposed to $1\,\mu\text{M}$ staurosporine for 5 hours to induce cell death and illicit a Bcl-2 signaling cascade response. Cells are then fixed, permeabilized, and stained with the Muse® Bcl-2 Activation Dual Detection Kit and analyzed on the Guava® Muse Cell Analyzer. Figure A shows the results summary, while Figure B shows results displayed by both dot plot and bar graph data.

The statistics captured in this assay show the relative percentages for each population as it is calculated within the total cell population. Cells which express Bcl-2 can be seen by the data on the top two quadrants of the dot plot (inactivated and activated), representing about 95% of the total cell population. But of this cell population, 92% is dephosphorylated upon treatment as indicated by a left shift, confirming inactivation of the Bcl-2 signaling pathway upon treatment. By presentation of both datasets, one can now determine the total: phospho ratio within their testing samples.

Figure A and B. Figures A and B show an example of results obtained using the Muse Bcl-2Activation Dual Detection Kit.





For more information, please refer to the comprehensive Bcl-2 Activation Dual Detection User's Guide, which can be found at www.luminexcorp.com/flowkits (Search for Catalogue Code, MCH200105)

Related Products

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

Muse® EGFR-RTK Activation Dual Detection Kit - MCH200102

Muse® PI3K Activation Dual Detection Kit - MCH200103

Muse® H2A.X Activation Dual Detection Kit - MCH200101

Muse® MAPK Activation Dual Detection Kit - MCH200104

Muse® System Check Kit - MCH100101

Muse® Count & Viability Kit (40 mL) - MCH100102

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