



complexity simplified.

## Quick Reference Card

# Muse® Annexin V & Dead Cell Kit MCH100105

To determine the apoptotic percentages and concentrations of cellular samples  
For Research Use Only. Not for use in diagnostic procedures.

### Storage Conditions

Store the Muse® Annexin V & Dead Cell Kit at 2 to 8°C, protected from light.

### Kit Components

Muse® Annexin V & Dead Cell Reagent (Part No. 4700-1485, 100 tests/bottle)

### Materials Recommended

- Guava® Muse® Cell Analyzer
- Cell suspension, untreated and treated to undergo apoptosis
- Micropipettors
- Disposable micropipettor tips
- Microcentrifuge tubes with screw caps, 1.5 mL (VWR Catalog No. 16466-030, or equivalent)
- Muse® Cell Dispersion Reagent (Catalog No. MCH100107), optional
- Vortex mixer

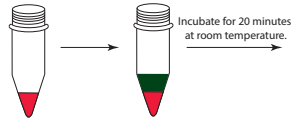
### Assay Protocol

Culture cells, including for positive and negative controls, for appropriate time to induce apoptosis.



Prepare cell samples for incubation with Muse® Annexin V & Dead Cell reagent.

Add 100 µL of Muse® Annexin V & Dead Cell Reagent to each tube.      Add 100 µL of cells\*\* in suspension to each tube.



Incubate for 20 minutes at room temperature.



\*\* Adherent cells have been validated for this assay. Refer to the kit user's guide.

**NOTE:** A detailed kit user's guide can be found at [www.luminexcorp.com/flowkits](http://www.luminexcorp.com/flowkits).

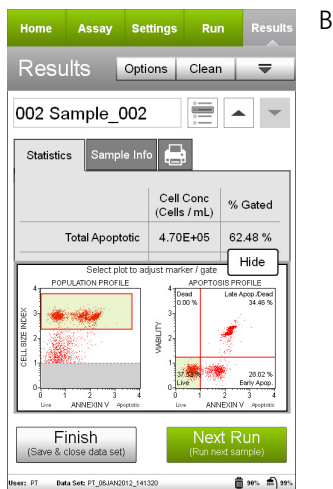
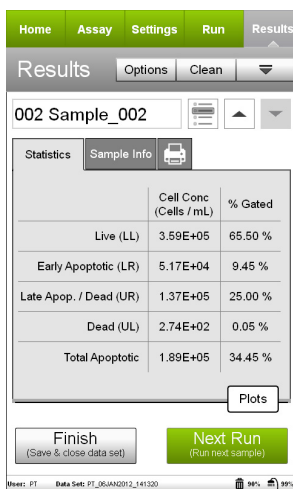
## Expected Results

Figures A and B show an example of results obtained using the Muse® Annexin V & Dead Cell Kit to stain Jurkat cells treated with staurosporine to induce apoptosis.

Events in each of the four quadrants are as follows:

- Lower-left quadrant: viable cells, not undergoing detectable apoptosis [Annexin V-PE (-) and Dead Cell Marker (-)]
- Lower-right quadrant: cells in the early stages of apoptosis [Annexin V-PE (+) and Dead Cell Marker (-)]
- Upper-right quadrant: cells in the late stages of apoptosis or dead by apoptotic mechanisms [Annexin V-PE (+) and Dead Cell Marker (+)]
- Upper-left quadrant: cells that have died via necrosis but not through the apoptotic pathway [Annexin V-PE (-) and Dead Cell Marker (+)]

**Figures A and B.** Example Data: Results obtained from Jurkat cells induced to apoptosis with 1  $\mu$ M staurosporine and stained with Muse® Annexin V & Dead Cell Kit and acquired on the Muse® Cell Analyzer. Figure A shows results without dot plots, while Figure B shows the same results with the optional dot plots. The statistics show the cell concentration in the stained cell sample and the percentages of the total represented by each population. The first plot in Figure B shows Annexin V vs. Cell Size; the second plot shows Viability vs. Annexin V.



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](http://www.luminexcorp.com/flowkits).

## Related Products

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

- Muse® System Check Kit - MCH100101
- Muse® Count & Viability Kit (100T) - MCH100102
- Muse® Count & Viability Kit (600T) - MCH600103
- Muse® Count & Viability Kit (200X) - MCH100104
- Muse® Cell Cycle Kit - MCH100106
- Muse® Cell Dispersal Reagent - MCH100107
- Muse® Caspase-3/7 Kit - MCH100108
- Muse® MultiCaspase Kit - MCH100109