



Protocol for 1CellAssay- Chamber Slide

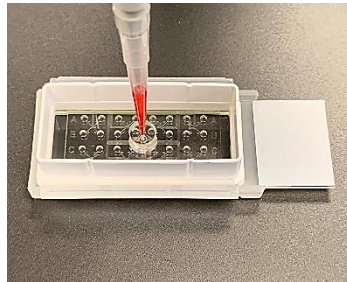
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Cell Preparation



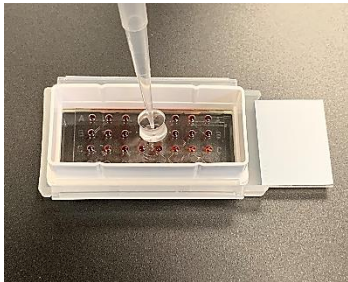
Prepare cell suspension with a concentration of 250-500 cells/mL into a cell culture medium or PBS buffer. Fully suspend the cells and pipette up 65 μ L of cell suspension containing 16-32 cells.

Single-Cell Isolation



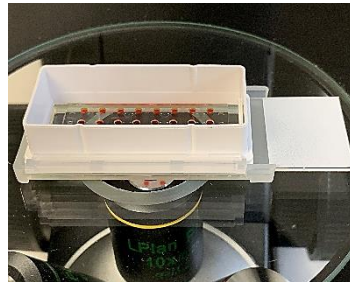
Load 65 μ L of suspension into the 1CellAssay-Chamber Slide. Vertically insert the pipette tip into the Inlet Adaptor. Press the pipette plunger down to its first stop. Hold it for about 10 seconds. DO NOT release.

Removal of Inlet Adaptor



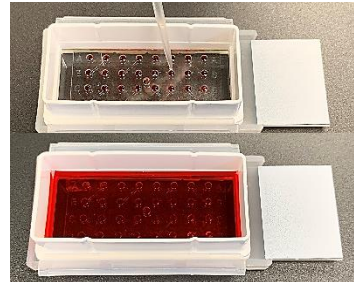
After the solution flows out, keep holding the pipette to prevent backflow. Then tilt the tip to detach the Inlet Adaptor from the 1CellAssay-Chamber Slide. Discard the pipette tip and Inlet Adaptor.

Single-Cell Imaging



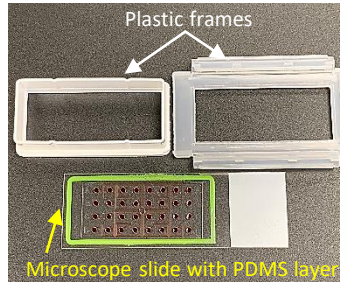
Check all the wells containing single cells with a microscope and a 10x objective is typically recommended. The yield should be ~10. If needed, stain the single cells for further fluorescence microscopy.

Cell Retrieval & Culture



Retrieve a single cell by setting a pipette to 2 μ L and pipetting the well 3-5 times. After the cell is fully suspended, retrieve it. Alternatively, add ~3 mL culture medium into the chamber slide to culture the single cells.

Removal of Chamber



Use two thumbs to press plastic frames down on both sides to remove the chamber, allowing the remaining microscope slide to be more accessible for further processing. If needed, the PDMS layer can also be removed.

Applications

- Single-Cell Isolation & Assay
- Single-Cell Culture & Assay
- Fluorescent and Microscopy Analysis of Living or Fixed Cells

