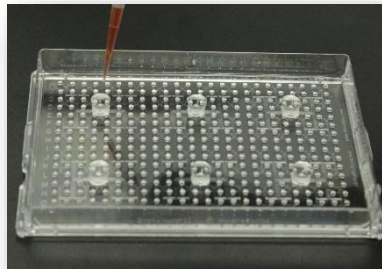


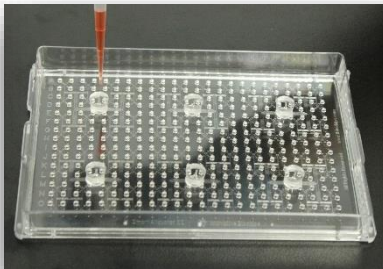
Quick-Start Protocol of Smart Aliquoter EE

Cell Preparation



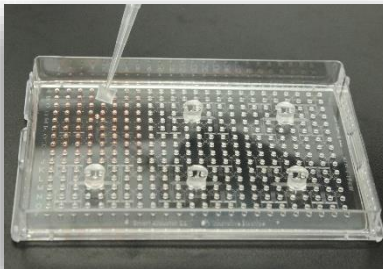
Prepare a cell suspension and uniformly suspend cells within media or PBS before loading them into each inlet adaptor of Smart Aliquoter EE only by using a commonly used single channel pipette.

Single-Cell Isolation



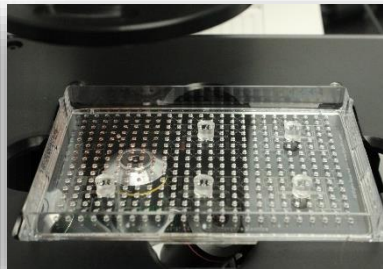
Vertically insert pipette tip into each inlet adaptor and press pipette plunger down to load 100-150 μL of cell suspension containing ~ 40 cells into the device. ~ 20 single cells will be isolated.

Removal of Inlet Adaptor



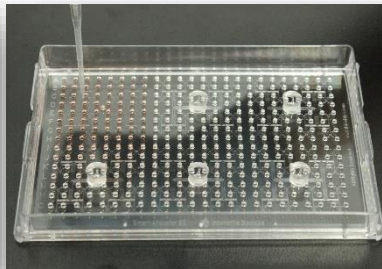
After loading, hold the device and tilt the pipette tip to remove the inlet adaptor, without releasing plunger button. The inlet adaptor will be easily detached from the Smart Aliquoter EE.

Single-Cell Identification



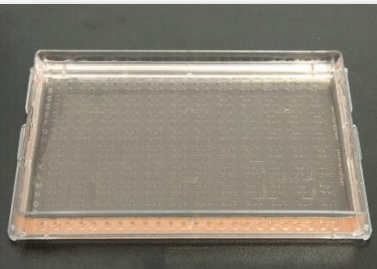
Identify wells (manually or automatically) containing the single cells under microscope. Note that all the 384 wells are labeled by both millimeter- & micrometer-scale numbers for easy tracking.

Single-Cell Transfer



Use a small pipette tip to resuspend single cells within the wells and transfer them as single-cell suspensions into PCR tubes for genetic analysis or other well plates for clonal analysis.

Single-Cell Cloning



Alternatively, load $\sim 250 \mu\text{L}$ of the cell suspension containing ~ 40 cells into each inlet adaptor and then add $\sim 20 \text{ mL}$ of cell media to culture ~ 2 weeks to harvest cloned cells from the noted wells.

Applications

- Single-Cell Isolation
- Single-Cell Cloning
- Single-Cell PCR
- Rare-Cell Isolation