

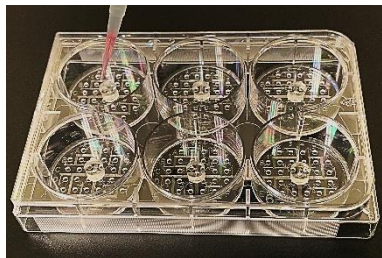


## Quick-Start Protocol of Smart Aliquoter mini

(Full Protocol and Video are available on website)

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### Cell Preparation



Prepare a 250-500 cells/mL cell suspension. Fully suspend cells into cell culture medium or PBS before loading them into Smart Aliquoter mini (SA mini) by using a regular single-channel pipette.

### Single-Cell Isolation



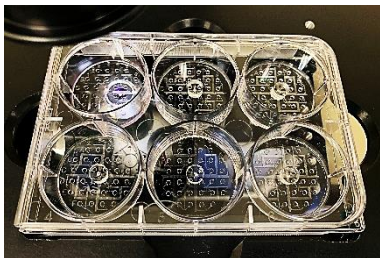
Vertically insert pipette tip into one Inlet Adaptor and press pipette plunger down to load 65  $\mu$ L of cell suspension containing 15-30 cells into the SA mini. The total single-cell yield is about  $10 \times 6 = 60$ .

### Removal of Inlet Adaptor



After loading, remove the Inlet Adaptor by tilting the pipette tip with holding the SA mini. DO NOT release the plunger button. The Inlet Adaptor will be easily detached from the SA mini.

### Single-Cell Identification



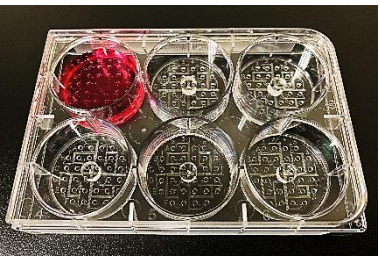
Identify wells containing single cells under microscope (e.g. bright field with 10x objective). Note that all the 32 wells are labeled by both millimeter- & micrometer-scale numbers for easy tracking.

### Single-Cell Retrieval



Use a small pipette tip to re-suspend a single cell within a well and transfer as  $\sim 2 \mu$ L of single-cell suspension into a tube or other container for downstream analysis, such as single-cell PCR.

### Single-Cell Cloning



Alternatively, load 100  $\mu$ L of cell suspension containing 15-30 cells into the Inlet Adaptor and then add 3 mL of culture medium to culture  $\sim 2$  weeks to harvest cloned cells from the noted wells.

### Applications:

- Single Cell Isolation
- Rare Cell Isolation
- Single Cell Cloning
- Single-Cell PCR & Sequencing
- CRISPR Cell Line Development