

Full Protocol of SA mini for Single-Cell Isolation

Step 1: Cell Suspension Preparation

1. Harvest adherent or suspension cells and make them into cell suspension.
2. Transfer 2 μL of cell suspension to a Petri Dish.
3. Identify the cell suspension and roughly estimate cell numbers under the microscope.
4. The ideal number of cells is 15-30. If too much/little, dilute/enrich it to match the number.
5. Add 65 μL of PBS/medium to the cell suspension and pipette cells to be fully suspended.
6. Aspirate the 65 μL of cell suspension (250-500 cells/mL) into pipette tip.

Step 2: Single-Cell Isolation

1. Vertically insert pipette tip into the Inlet Adaptor.
2. Press pipette plunger down (65 μL +P) to load cell suspension into the 32 Outlet Wells.
3. 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 SA mini.

Step 3: Single-Cell Identification

1. Put the SA mini under microscope with 10x objective (bright field or fluorescence).
2. Identify and note all Outlet Wells containing only single cells.

Step 4: Single-Cell Retrieval

1. Pipette the isolated single cells to be fully suspended within the Outlet Wells.
2. Transfer single cells as about 2 μL of suspensions to a well-plate or tube for analysis, such as single-cell PCR.

