

# Full Protocol of 1CellPlate for Single-Cell Isolation

## Step 1: Cell Suspension Preparation

1. Harvest adherent or suspension cells and make them into cell suspension.
2. Transfer 2  $\mu\text{L}$  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 25-35. If too much/little, dilute/enrich it to match the number.
5. Add 100  $\mu\text{L}$  of PBS/medium to the cell suspension and pipette cells to be fully suspended.
6. Transfer the 100  $\mu\text{L}$  of cell suspension into one Inlet Port of 1CellPlate.

## Step 2: Single-Cell Isolation

1. Put a pipette tip containing an Inlet Adaptor on the top of Inlet Port.
2. Press pipette plunger down (100  $\mu\text{L}$  +P) to aliquot cell suspension into the 32 Outlet Wells.
3. Add 100  $\mu\text{L}$  of PBS/medium into the Inlet Port to prevent back flow.

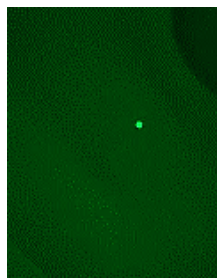
## Step 3: Single-Cell Identification

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

## Step 4: Single-Cell Transfer

1. Pipette the isolated single cells to be fully suspended within the Outlet Wells.
2. Transfer desired single cells as  $\sim 3 \mu\text{L}$  of suspensions to other containers such as PCR tubes.

Before transfer



After transfer

