iBiochips

Protocol for

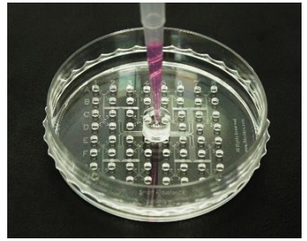
1CellDish™-60mm

Innovative Biochips LLC
202 Industrial Blvd, Suite 703
Sugar Land, TX 77478, USA
+1 (832)538-1925
info@ibiochips.com
https://ibiochips.com/

Cell Preparation

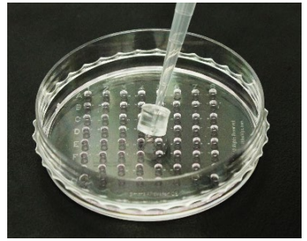
Prepare cell suspension with a concentration of 250-500 cells/mL into a PBS buffer or cell culture medium. Fully suspend the cells and pipette up 130 µL of cell suspension containing 32-64 cells.

Single-Cell Isolation



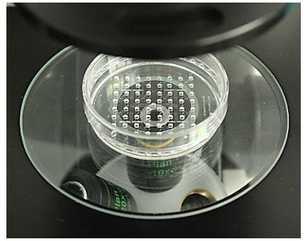
Load 130 µL of suspension into 1CellDish. Vertically insert the pipette tip into the Inlet Adaptor. Press the pipette plunger down to its first stop. Hold it for about 20 seconds. DO NOT release.

Removal of Inlet Adaptor



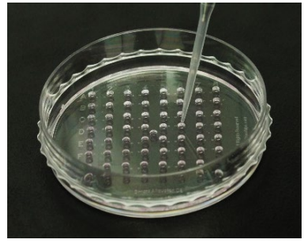
After the solution flows out, keep holding the pipette to prevent backflow. Then tilt the tip to detach the Inlet Adaptor from the 1CellDish. Discard the pipette tip and Inlet Adaptor.

Single-Cell Identification



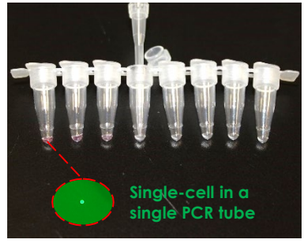
Check all the wells containing single cells with a microscope. Bright-field or fluorescence with a 10x objective is typically recommended. Write down well labels with target single cells. The yield should be ~20.

Single-Cell Retrieval



Retrieve the target single cell by setting a pipette to 2 µL and pipetting each well up and down 3-5 times. After the target cell is fully suspended, rapidly retrieve the suspension from 1CellDish.

Single-Cell Transfer



Transfer the 2 µL of single-cell suspension into another container for your downstream analyses, e.g. an 8-well PCR tube strip for single-cell lysis and PCR.

Applications

- Single-Cell Isolation
- Single-Cell Lysis
- Single-Cell Multiomics
- Single-Cell PCR & Sequencing
- CRISPR Cell Isolation
- Stem Cell Isolation

iBiochips