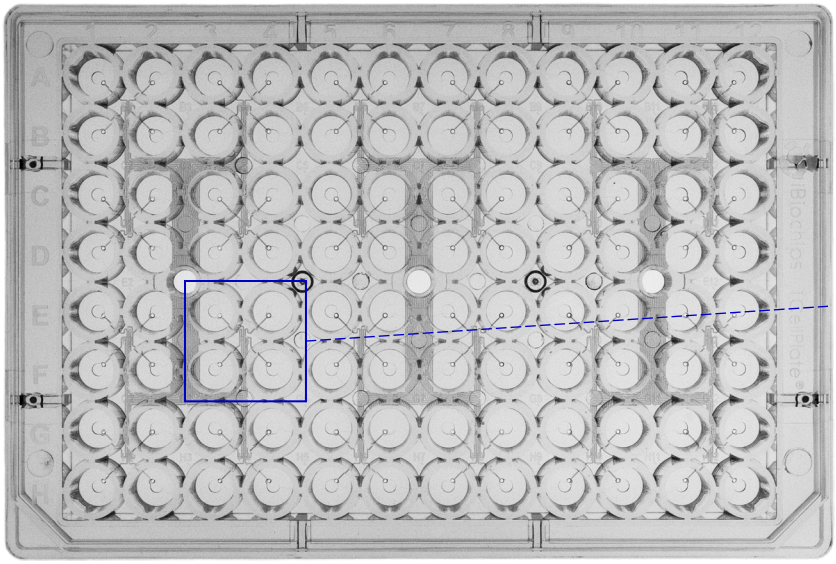
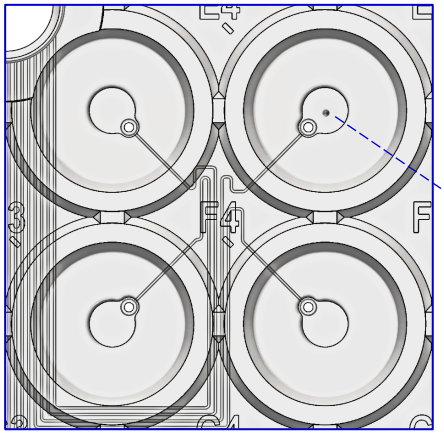
1CellPlate®-96well

Ultra-Low Volume 96-Well-in-Well Microfluidic Microplate

1CellPlate®-96well Ultra-Low Volume 96-Well-in-Well Microfluidic Microplate combines unique well-in-well structures with microfluidic channels to meet various single-cell analysis needs including clonal and genetic analyses.



Cat. No. P1-SCP-5PK



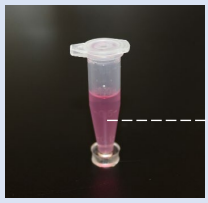
Isolate 1 cell in 2.5 µL volume

Specifications	Description
Format	Standard 96-well plate format
Material	Polystyrene & polypropylene
Sterility	Sterile
No. of Wells	96 wells (12 x 8 array)
Well Volume	166 µL (Inlet Port), 2.7 µL (Inner Well), 350 µL (Outer Well)
Well Bottom	Flat polystyrene
Surface Treatment	Tissue culture-treated
Single-Cell Yield	~ 30 per device (~10 x 3)
Single-Cell Volume	2.5 µL (isolation to transfer), 200 µL (culture to clone)
Compatible Cell Size	≤ 80 µm (diameter)
Cell Types Can Be Isolated	3 cell types per device

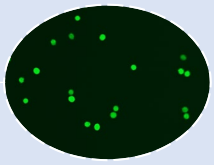
Innovative Biochips LLC

202 Industrial Blvd, Suite 703, Sugar Land, TX 77478, USA | +1 832.538.1925 | info@ibiochips.com | https://ibiochips.com

Initial Cell Suspension

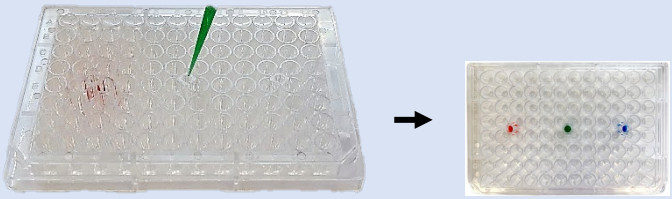


250-350 cells per mL

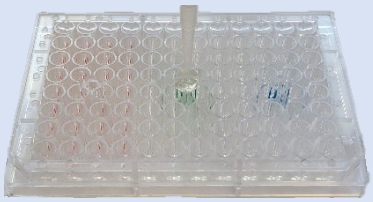


Single-Cell Isolation by 1CellPlate®-96well

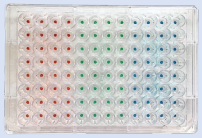
1. Add initial cell suspension into each Inlet Port



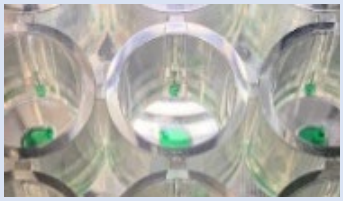
2. Isolate ~ 30 single cells in 30 seconds



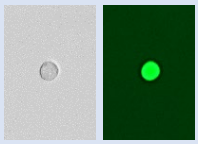
2.5 µL per Inner Well



3. Identify isolated single cells in Inner Wells



BF or FL



Features

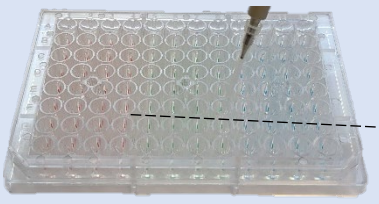
- ✓ Compatible with cell diameter ≤80 µm
- ✓ Compatible with cell numbers ≤100 cells
- ✓ Compatible with cell types 1-3 types/device
- ✓ Small single-cell isolation well: 2 mm diameter
- ✓ Large single-cell culture well: 6.5 mm diameter
- ✓ Ultra-low single-cell isolation volume: 2.5 µL/cell
- ✓ Gentle microflow keeps high single-cell viability
- ✓ No liquid backflow and cross-talk between wells
- ✓ Easy operation by regular pipette in a sterile hood
- ✓ No special equipment or operation skills are required

Applications

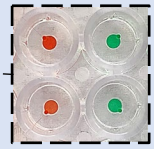
- ✓ Single-Cell Isolation
- ✓ Cell Line Development
- ✓ Stem Cell Isolation
- ✓ CRISPR Cell Line Development
- ✓ Single-Cell Lysis
- ✓ Single-Cell Multiomics
- ✓ Single-Cell PCR & Sequencing

Single-Cell PCR: 1 Cell in 1 PCR Tube

1. Retrieve desired single cells from Inner Wells

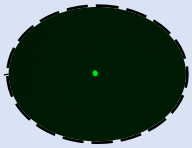


2.5 µL per Inner Well



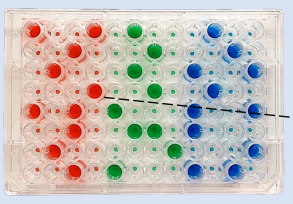
2. Transfer one cell into one PCR tube

1 cell per 2.5 µL



Single-Cell Cloning: 1 Cell in 1 Culture Well

1. Add medium into Outer Wells having single cells



200 µL per Outer Well

2. Culture for several days to generate clonal cells