

1CellAssay[®] Ultra-Low Volume Single-Cell Isolation & Lysis Kit provides a complete solution from easy single-cell isolation in a 2 μ L volume for downstream single-cell lysis, PCR & sequencing.



Cat. No. K1-SCLS-KIT

Highlight

- ❖ Guarantee to isolate 24 single cells
- ❖ Isolate single cells in 2 μ L volume
- ❖ Lyse single cells in 4 μ L volume

Applications

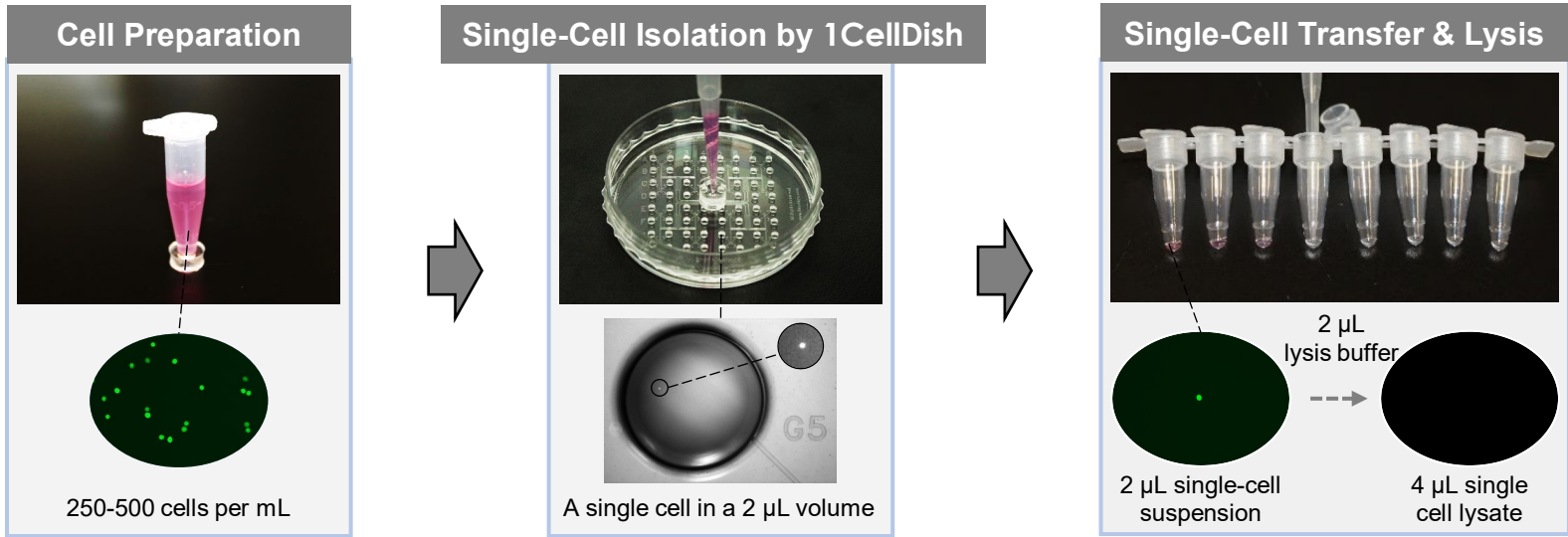
- ✓ Single-cell isolation from cell lines, CRISPR-edited cells, stem cells, and primary cells
- ✓ Single-cell lysis in a small volume
- ✓ Single-cell PCR & sequencing
- ✓ Single-cell multi-omics assays, e.g. protein and metabolite quantification

Features

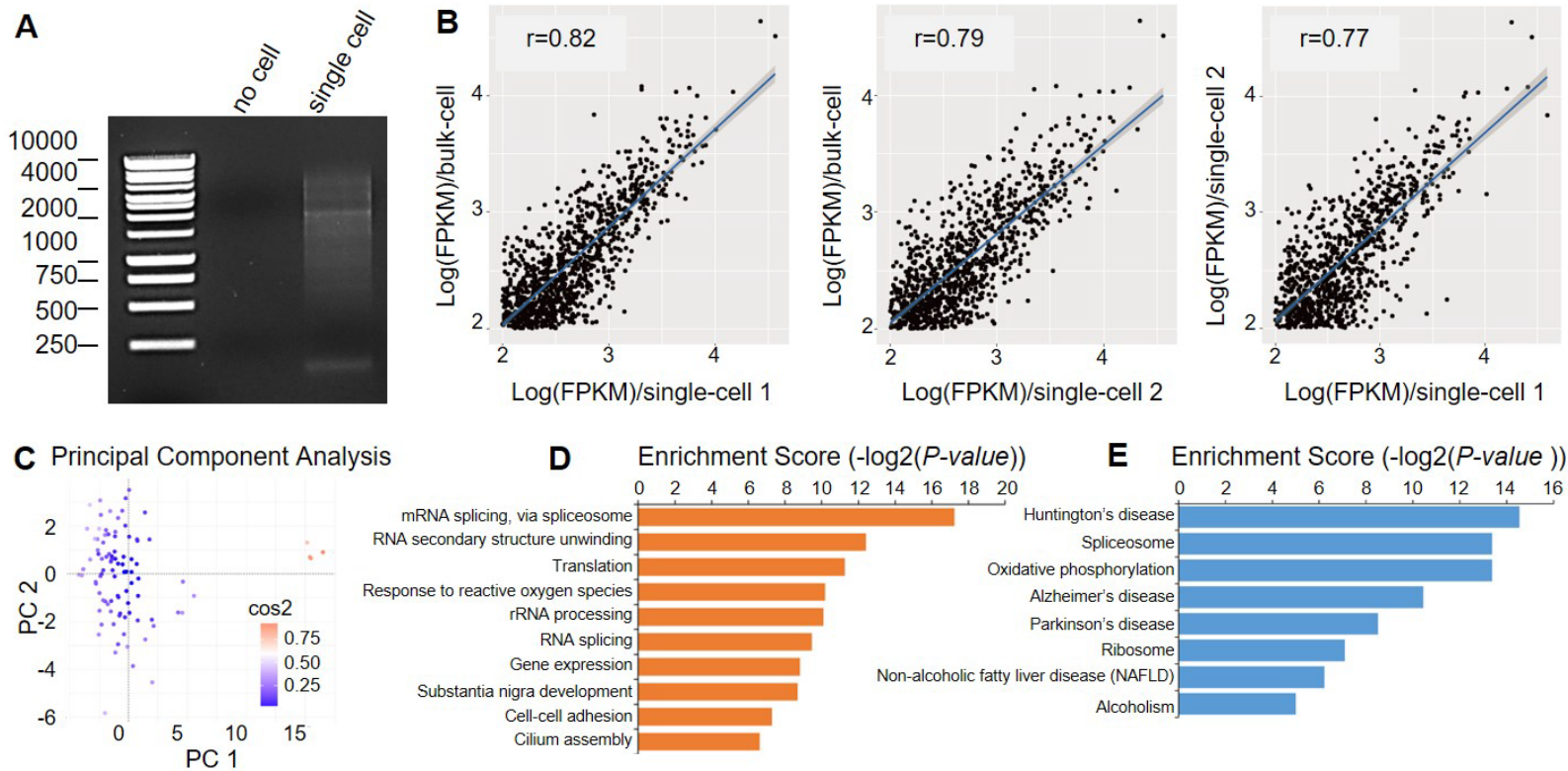
- ✓ Easy operation by regular pipette in a sterile hood
- ✓ Gentle flow keeps high single-cell viability & integrity
- ✓ Compatible with cell size $\leq 50 \mu\text{m}$ and numbers ≤ 100
- ✓ Isolate and lyse 24 single cells in less than 30 minutes
- ✓ No special equipment or operation skills are required
- ✓ No liquid backflow or cross-talk between wells

Component	Description
1CellDish [™] -60mm	2 devices (60 mm Petri Dish format; flat polystyrene well bottom; isolate ~ 20 single cells per device)
Cell Lysis Buffer	200 μ L (10mM Tris pH 7.5, 130mM NaCl, 1% Triton X-100 [™] , 10mM NaF, 10mM NaPi, 10mM NaPPi)
8-Strip PCR Tubes	3 strips (DNA, RNase & DNase free; compatible with 0.2 mL thermal cycler for qPCR/Real-Time PCR)

Single-Cell Isolation and Lysis



Single-Cell PCR and RNA-Sequencing



(A) Analysis of partially purified cDNA from 1 single NK-92 cell.

(B) Correlations between 2 single NK-92 cells and bulk NK-92 cells in RNA-seq measurement of the gene.

(C) Principal Component Analysis of 92 single HEK 293 cells (blue dots) and 4 non-template controls (red dots).

(D-E) Enrichment analysis of GO terms and pathways for highly variable genes of 92 single HEK 293 cells.

Note: 1CellDish™-60mm is used with SMART-Seq v4 Kit (A-B) and BD Whole Transcriptome Analysis Kit (C-D).