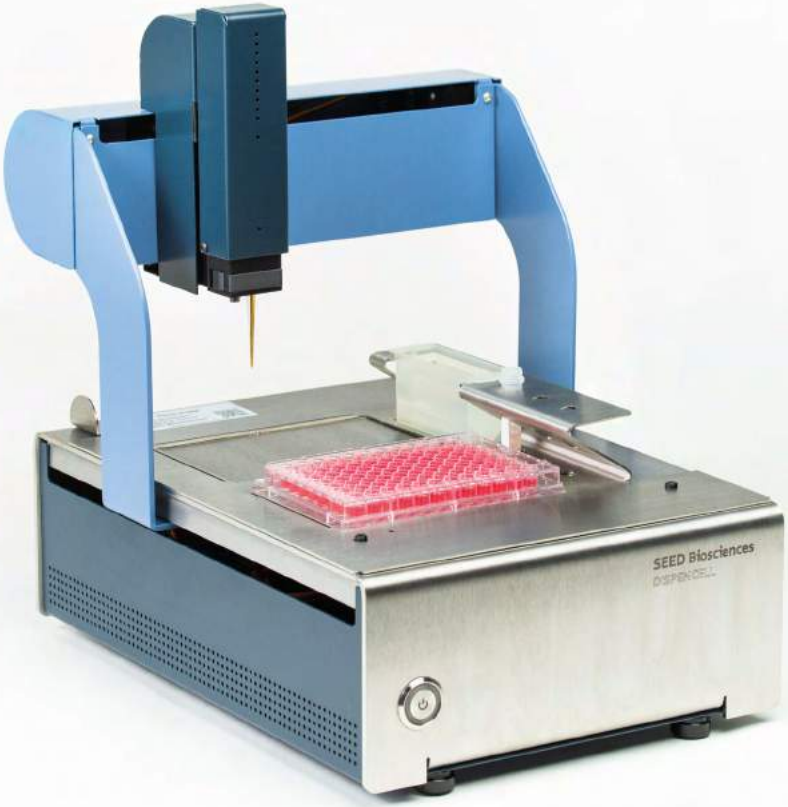
SEED • Biosciences

Enabling Tomorrow's Medicine

DISPENCELL empowers scientists to isolate single cells more efficiently and reliably.

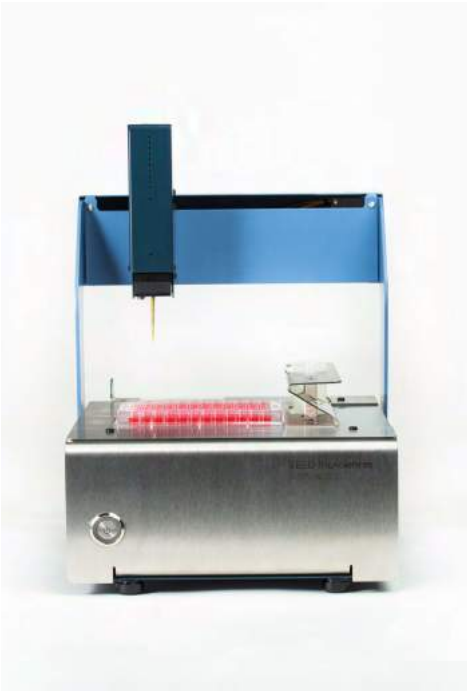


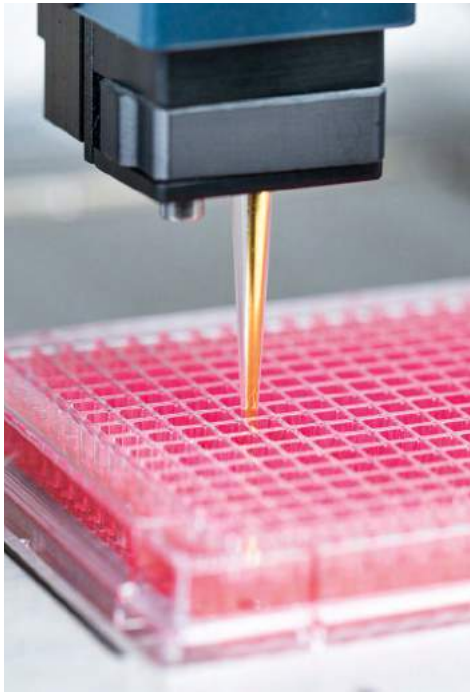
One click,
One cell.

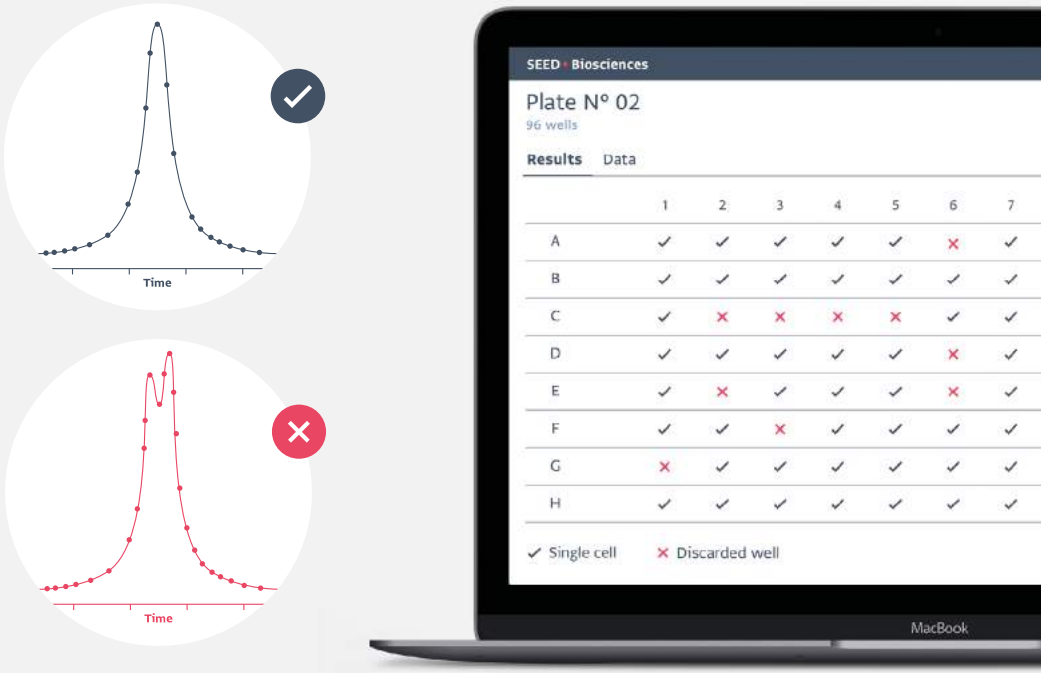
DISPENCELL

A Simple Single-cell Dispenser

DISPENCELL is an automated laboratory instrument developed for fast, easy and gentle single-cell isolation. Designed by scientists for scientists, DISPENCELL has been designed to integrate seamlessly into your lab routine, with a plug-and-play approach.



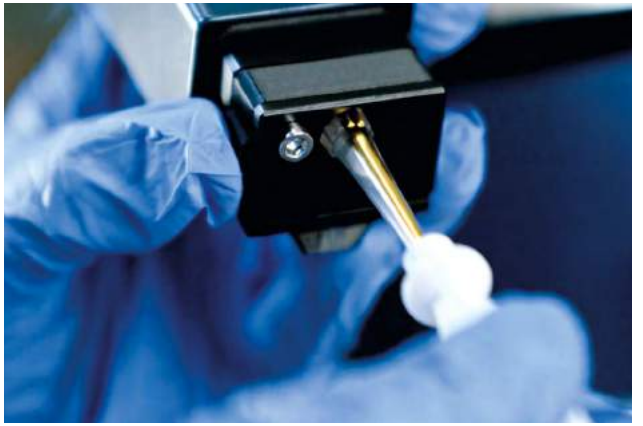




TRACEABILITY

Single-cell Mapping

Single-cell analysis software provides a map for immediate and traceable proof of clonality. DISPENCELL's single-cell dispensing unit is fitted with a sensing tip that detects the passage of the cells. As each cell advances, a unique electrical signal is triggered. This unique electrical trace is immediately recorded, allowing the user to check for proof of clonality immediately after the cells are dispensed. The full set of data is stored in a proof of clonality report. DISPENCELL's technology is patented.



→ DISPENCELL is fitted with a sensing tip that acts as a Coulter counter. As a single cell passes through the Coulter aperture to flow into the well, it leaves an electrical signature that appears as a unique peak, whereas multiple peaks result from doublets or multiple cells.

BENEFITS

An Enhanced User Experience for Faster and Better Results

EASY TO USE
Intuitive with a simple interface and easy to set up. No cleaning or calibration required.

CONTAMINATION-FREE
A patented disposable tip ensures clean isolation of single cells and no cross-contamination. Certified free from animal products and cytotoxic material.

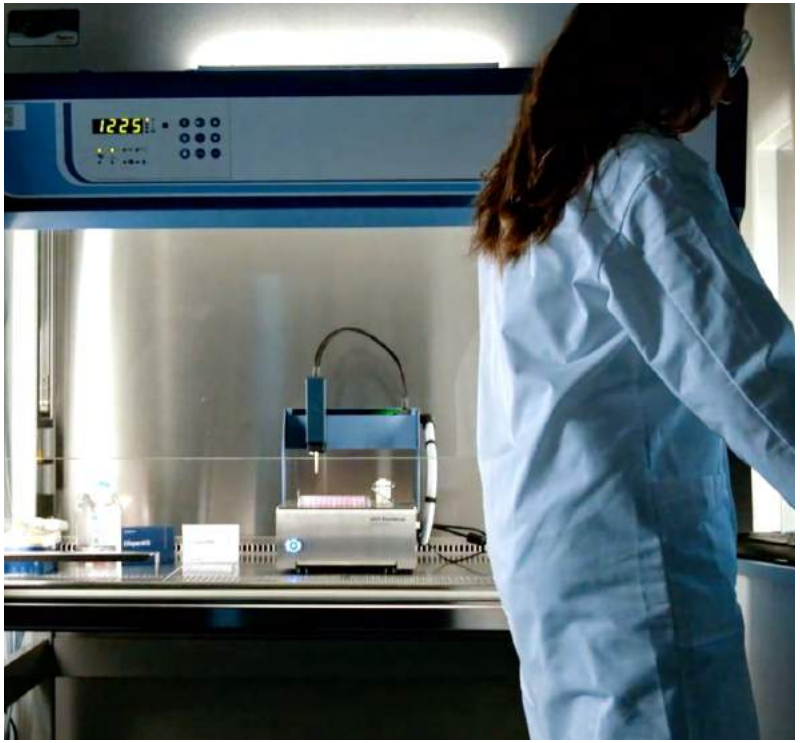
PROOF OF CLONALITY
A single-cell analysis software tool provides a traceable proof of clonality report instantly.

HIGH CLONING EFFICIENCY
Its unique design ensures gentle dispensing for better viability and cloning efficiency.

COMPACT
Benchtop-sized, DISPENCELL fits perfectly under a hood to work under sterile conditions, on a bench top for routine seeding or in a pre-existing automated workflow.

"The DISPENCELL is not rocket science and that's exactly why we like it. User adoption is easy, it is gentle with cells and it provides monoclonality assurance. Those are key features that we need in a robust iPSC line development factory."

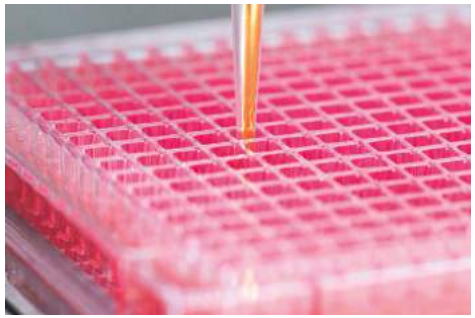
HANS WEBER Automation Lead, Century Therapeutics



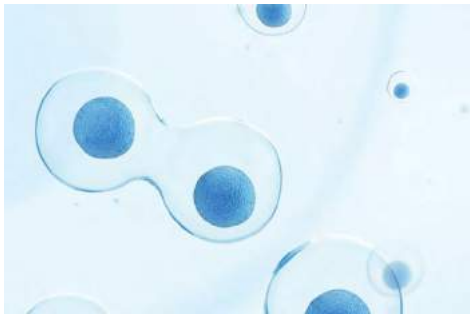
SUITABLE APPLICATIONS

The Right Instrument to Optimize your Workflow

Single-cell isolation and proof of clonality are essential to multiple applications, including cell line development, CRISPR-mediated gene editing, rare cell isolation, monoclonal antibodies screening and single-cell genomics. Application notes are available to guarantee an optimal user experience.

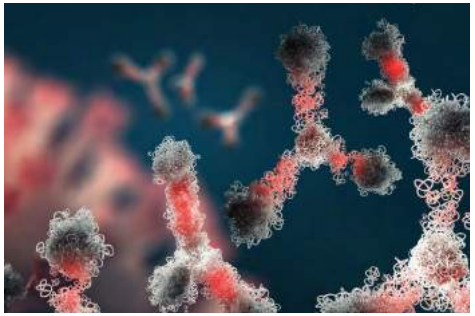


CELL LINE DEVELOPMENT



CRISPR-MEDIATED GENE EDITING

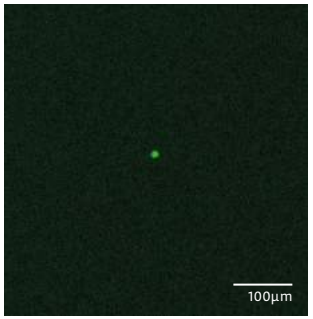
MONOCLONAL ANTIBODY SCREENING



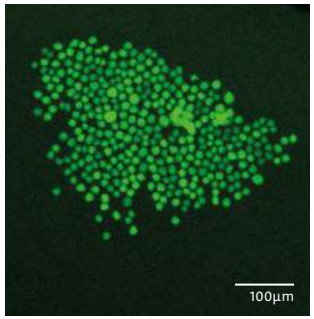
RARE CELL ISOLATION

CELL-FRIENDLINESS

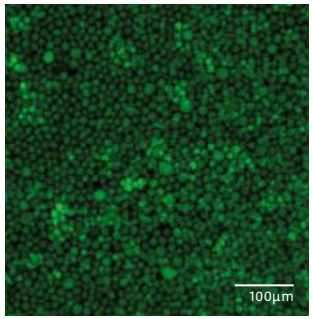
As Gentle as Manual Pipetting



DAY 0



DAY 7



DAY 14

DISPENCELL'S unique technology allows extremely gentle handling of the cell sample, comparable to manual pipetting (less than 0.1 psi), yet more efficient. Consequently, cell viability and outgrowth are preserved.

↖ Clonal outgrowth of a single CHO cell dispenced with DISPENCELL.

TECHNICAL SPECIFICATIONS

DISPENCELL Compared to Other Cell Sorters

	DISPENCELL	OTHER CELL SORTERS
PRESSURE	Less than 0.2 psi	20 to 70 psi
PLATE HOLDER	2 plates (96 or 384 wells)	1 plate
MINIMAL CELL NO	200 cells	> 5'000 cells
CALIBRATION	No need	30 min to 1 h
CLEANING	No need	30 min
SAMPLE PREP.	10 min	30 min
DISPENSING	96 well plate in 5 min	96 well plate in 2 min
CELL PARAMETERS	Size, doublets	Size, doublets, colours

TRUSTED BY

REFERENCES

Bonzon, D. et al. (2020) 'Impedance-Based Single-Cell Pipetting', SLAS TECHNOLOGY: Translating Life Sciences Innovation, 25(3), pp. 222–233. doi: 10.1177/2472630320911636.

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Get started.
Explore single-cell dispensing with us.

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SEED Biosciences is a Swiss award-winning company providing innovative solutions for your single-cell assays.