

DISCOVER

CELLEN ONE X1 NEO



ABOUT CELLEN ONE X1 NEO

cellenONE® X1 NEO is an all-in-one platform designed for the most demanding single cell workflows. Combining image-based isolation with ultra-precise picoliter to nanoliter dispensing, it ensures unmatched accuracy, reproducibility, and flexibility.

With dedicated software packages, environmental control, and seamless integration with proteoCHIP® consumables, NEO delivers turnkey solutions for genomics, transcriptomics, proteomics, and cell line engineering.

From discovery research to high-value applications in oncology or precision medicine, cellenONE® X1 NEO provides the tools, the methods, and the know-how to accelerate innovation.

KEY FEATURES



Single cell isolation



Precision liquid dispensing



On-deck temperature control



Brightfield and/or Fluorescence



Image recording of every isolated cell



End-to-end sample preparation workflows





CELLEN ONE X1 NEO BENEFITS



Isolate up to 100% single cells, alive

- 95-100 % single cells avoiding doublets, debris and empty wells
- No size bias
- Ultra gentle acoustic-based dispensing technology
- Temperature control for improved cell viability



Unmatched versatility

- Any cell type (from 0.5 to 80 μm): capture sample heterogeneity from the same sample
- Any sample size (from 3 µL), any reagent
- Any consumable, from standard (i.e. 96, 384, 1536 well plates, Thermo Scientific™ Piko PCR, glass slides, etc.) to custom labware
- Any single cell application, from cloning to cell line engineering to single cell multi-omics or spatial proteomics





Focus on your very target cells

- Live imaging of cell sample content
- Four fluorescence channels, with high-intensity LEDs
- User-defined sorting parameters (morphology and/or fluorescence based)
- Record image of every isolated cell



ALL-IN-ONE: Combine cell isolation, reagent dispensing and incubations

- Proprietary picoliter dispensing, for pico- to nanoliter range volume reactions
- 250-600 pL per drop for sample prep miniaturization
- High precision in all dimensions: accurate volumes on accurate positions
- Run incubations on the instrument deck, with accurate and fast temperature and humidity controls



Automation and fluidity, throughout your workflow

- Faster instrument start-up time and improved user experience
- Application-dedicated Software Packages
- End-to-end workflows: create your own or use the pre-installed runs
- Synergy with proteoCHIP® for seamless single cell proteomics

APPLICATIONS

OMICS



Single cell proteomics



Spatial proteomics



Single cell genomics



Single cell transcriptomics



VISIT OUR

Single cell epigenetics

CLONING



Cell engineering



Stem cells



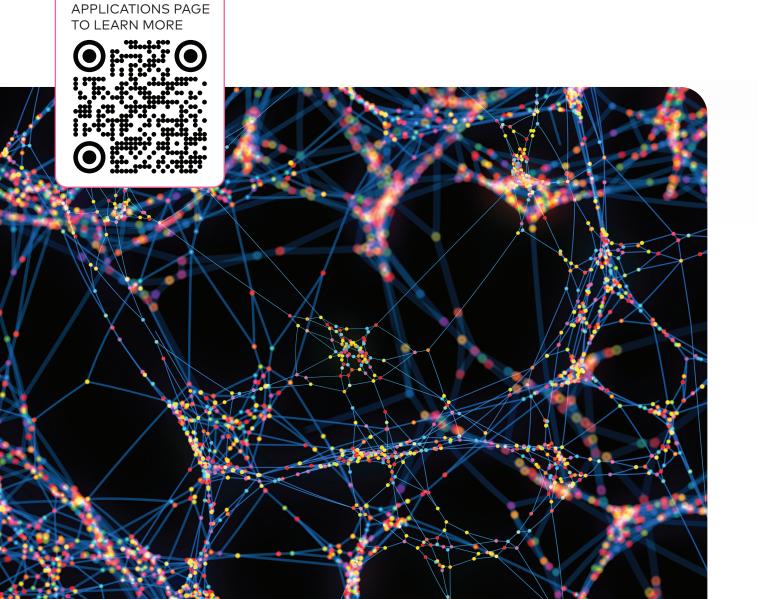
Synthetic biology



Monoclonal antibody



Microbiology



New Software Packages For New Possibilities

With cellenONE® X1 NEO, you can expand beyond the essentials. Our suite of software packages lets you tailor your system to your research goals, whether streamlining standard workflows, isolating rare cells, advancing microbiology, or enabling end-to-end single-cell proteomics. Choose only what you need, when you need it.

Package

Standard Isolation Package 3.0 – Powerful Essentials, Built Right In

Fluorescence Package – Illuminate, Identify, Isolate

Advanced Cell Isolation Package 3.0 – Capture the Rare, Control the Unconventional

Microbiology Package – Detect the Small, Discover the Significant

Proteomics Package 3.0 – Simplify, Standardize, Scale

Best for / Key Benefits

Included with every instrument, everything you need to kickstart your cell isolation workflows with confidence. From precise reagent dispensing to comprehensive data logging and reporting: all the core capabilities, right out of the box

Featuring 4 high-performance, LED-based fluorescent channels, making complex sorting workflows easier, faster, and more precise. Supports viability checks, marker-based isolation, and advanced data collection.

Built for rare cells, irregular particles, and non-standard workflows, delivering precision, efficiency, and confidence every step of the way. Includes enrichment mode, manual isolation, and custom dispensing/QC.

Designed to support demanding microbiology applications, this advanced detection algorithm improves clarity and accuracy, ensuring that even subtle signals stand out.

Unlock the full potential of single-cell proteomics with pretested, end-to-end workflows, designed to take you seamlessly from reagent dispensing to cell isolation to final solution, ready for downstream mass spectrometry.

Every workflow is unique: our software packages give you the flexibility to grow and innovate at your own pace.

Looking for technical details and full feature descriptions? Discover the complete guide in our dedicated Software Packages flyer.



PRODUCT SPECIFICATIONS

Cell size / range	0.5 - 80 μm
Single cell accuracy	95-100%
Image-based detection / isolation criteria	Morphology in brightfield: Size & circularity criteria Fluorescence intensity: DAPI (ex. 375 nm; em. 432 nm) FITC (ex. 470 nm; em. 515 nm) Cy3 (ex. 565 nm; em. 580 nm) Cy5 (ex. 625 nm; em. 670 nm)
Target capacity	2 MTPs, 8 standard glass slides
Target compatibility	All MTP plates, microscope slides, custom target consumables
Isolation speed	40 cells / min
Target temperature range	4-85°C
Source sample temperature	Ambient or 10°C
Dispensing technology	On-demand droplet generation by gentle acoustic wave (sciDROP PICO)
Droplet volume	250-600 pL
Average coefficient of variation of drop volume	< 2 %, typically < 0.5 %
Axis system	X-Y Linear Magnetic Drive, Z Spindle Drive
Dispensing position precision	3 µm
Dimensions with enclosure (L x W x H)	650 x 700 x 1,590 mm
Weight	Approx. 242 kg

CONTACT US

Cellenion SASU

60 Avenue Rockefeller Bioserra 2, 69008 LYON France Tel: +33 986 48 70 70 contact@cellenion.com www.cellenion.com

SCIENION GmbH

Wagner-Régeny-Str. 15 12489 Berlin, Germany Fon +49 (0)30 6392 1700 Fax +49 (0)30 6392 1701 support@scienion.com www.scienion.com

SCIENION US, Inc

1231 W. Warner Road, Ste. 103 Tempe, AZ 85284 United States Tel: +1 (888) 988-3842 USsalessupport@scienion.com

SCIENION (UK) Ltd

2000, Lakeside North Harbour Western Road, Portsmouth PO6 3EN United Kingdom +44 (0)7483 388 271 +44 (0)23 9323 3603 support@scienion.com

SCIENION China

Room 1106B Building 3 No.391 Guiping Road Xuhui District, Shanghai Phone: +86 186 2170 9292 support@scienion.com www.scienion.com