

# Pioneering Picodroplet Single Cell Analysis & Isolation Sphere Fluidics Solutions



## Unlock the Power of Picodroplets

Sphere Fluidics offer microfluidic picodroplet technology platforms for single cell isolation & analysis, enabling you to isolate the most valuable cells with unparalleled ease & speed.

Explore the technology

Picodroplets revolutionise single cell isolation & analysis

Droplet microfluidic biochips master fluid control

Instrument software controls instruments, assays, workflows & analyses data

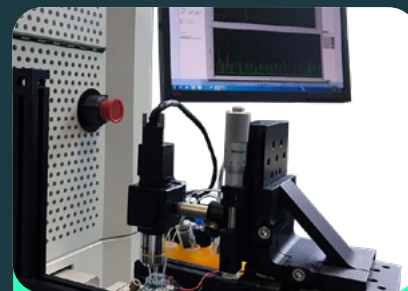
## Explore the platforms



Cyto-Mine®



Pico-Mine®



Spectra-Mine®

You have a workflow  
We have a way  
to get you there

## Why Sphere Fluidics?

- Picodroplet microfluidic technology experts
- Automated efficiency with integrated platforms
- Future proof unmatched picodroplet technology
- Platforms built on robust evidence from influential leaders
- Collaboration partner excellence



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Buy Now  
Save with Free  
Cyto-Surf®  
A & B

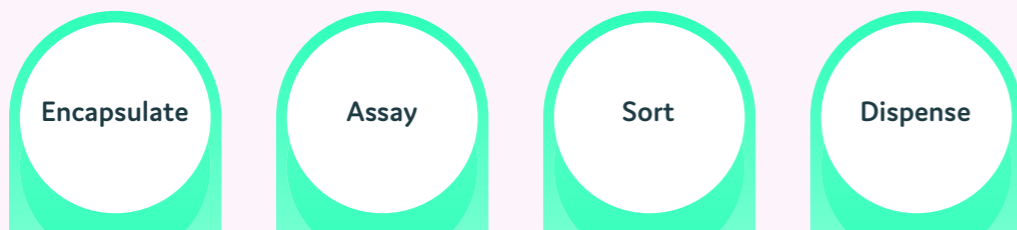


## Streamline & Automate Antibody Discovery & Cell Line Development Workflows with Cyto-Mine®

Fully automated rapid analysis, selective screening, sorting imaging & dispensing into microtitre plates or individual wells, all while preserving optimal cell viability & enabling detailed analysis of secreted proteins or biomolecules.

[Book a demo](#)

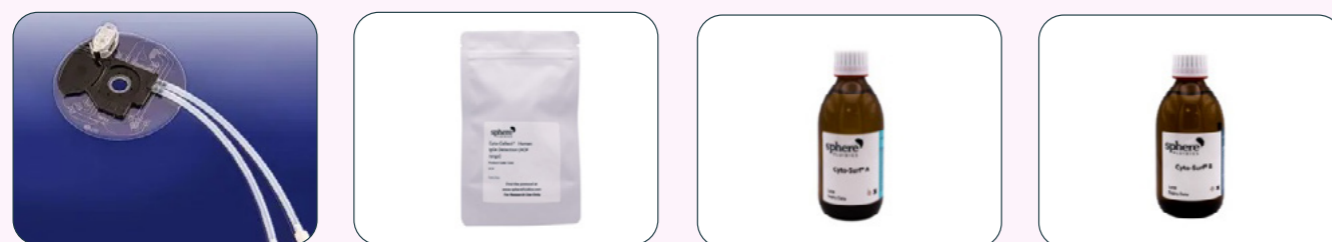
- Encapsulate up to 200,000 single cells or up to 40 million cells in mini-pools in one run.
- Targeted discovery assesses cell line productivity or identifies & isolates rare cells of interest.
- Image each individual cell for assurance of monoclonality.
- Flexible assay design enables quantitative measurement of antibody secretion & other detection methodologies.
- Cyto-Mine® 21 CFR Part 11 & GLP compliant with Animal Free reagents. Compatible for use in BSCII.



### Applications



### Consumables & Reagents



Cyto-Cartridges®

Cyto-Collect® Probes

Cyto-Surf® A

Cyto-Surf® B



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**Get Application and  
Technology Support Now**

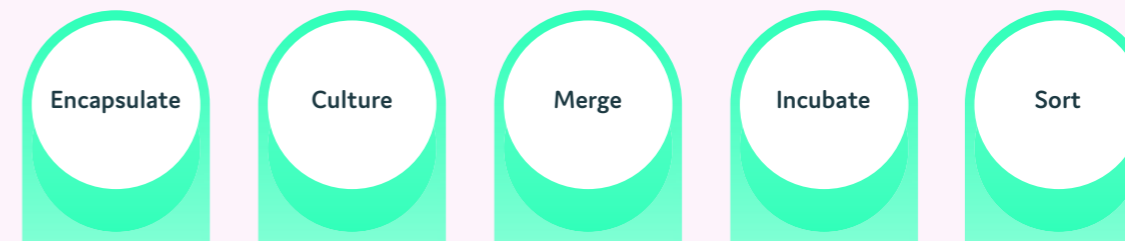


## Empower early stage research with picodroplet technology using Pico-Mine®

[Book a demo](#)

Buy Now  
Save with  
Choice of 1 Free  
Reagent

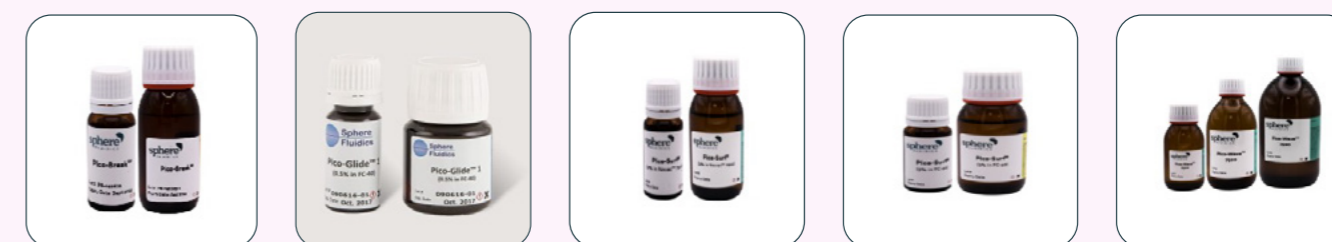
- Pico-Mine® semi-automated platform for earlier stage research with picodroplet technology.
- Uncover rare biological variants in large cell populations, boosting throughput & reducing cost.
- Each picodroplet encapsulates a cell. These droplets can then be used to build complex workflows.
- Novel functions such as splitting & liquid injection.
- Build custom workflows easily, user friendly with no microfluidics expertise required.



### Pico-Mine® Applications



### Consumables & Reagents



Pico-Break™ Emulsion  
Breaking Solution

Pico-Glide™ 1

Pico-Surf® (2% (w/w)  
in Novec™ 7500)

Pico-Wave™ 7500

Pico-Surf® (5% (w/w)  
in Novec™ 7500)



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## Spectra-Mine® the World's ONLY Platform combining High Throughput Picodroplet Screening with Real-Time Mass Spectrometry Measurement & Selection

Fully automated rapid analysis, selective screening, sorting imaging & dispensing into microtitre plates or individual wells, all while preserving optimal cell viability & enabling detailed analysis of secreted proteins or biomolecules.

**Book a demo**

- Spectra-Mine® applies mass spectrometry to picodroplets for a label free method, automatically identifying & selecting valuable cells.
- Customised workflows for high-throughput, cost effective & accurate screening without fluorescence assays.
- Achieve label free, high throughput target molecule measurement using mass spectrometry.
- Successful recovery of viable cells of interest.
- Tailored workflows to meet user needs through PaaS Sphere Fluidics service offering.

Encapsulate

Assay

Sort

Dispense

Let's collaborate to customise your workflow & deliver screen results!

### Spectra-Mine® Applications

Strain engineering

Bioprocessing

Interaction studies

Synthetic biology

### Picodroplets + Mass Spectrometry = Results

**Overcome mass spectrometry limitations**  
Picodroplets encapsulate single cells, enabling high-throughput screening without compromising delicate samples or missing rare cells.

**Label-free screening**  
Spectra-Mine® enhances high throughput picodroplet screening with label-free selection using direct mass spectrometry, eliminating the need for fluorescence assays.

**Retrieve rare cells alive**  
Preserve low volume or single cell samples in picodroplets during measurement, ensuring live sorting afterwards with electric field based picodroplet technology.

**Access through PaaS**  
Platform as a Service offering. Match your workflow with adjustable daughter droplet sizes, fluorescence, optical measurements & optimised spectrum analysis algorithms.

**CapellaScience**

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**sphere**  
FLUIDICS  
work small, think big.