

- DNA & RNA from FFPE Samples
- Consistent Nuclei Isolation
- Organoid Isolation
- Spatial Multi-omics
- Microfluidic Cell Sorting
- Single Cell DNA Seq
- Tissue Clearing
- Cell Culture under Hypoxia and Pressure
- Exosome Characterization
- ... and many more



Your Precious Sample

**Essential Tools for
Scientists in Academia and Industry**

Capture Biological Complexity

Your complete *in-situ* platform for single-cell spatial genomics

Introducing the Vizgen MERSCOPE™ Platform

To truly understand cell biology and gene expression, researchers need tools that preserve the natural complexity of tissues. They need to capture the heterogeneity of cells to know how tissues are organized and how those cells interact. This is what *in situ* single-cell spatial genomics achieves.

Operating at the intersection of genomics and traditional biomarker imaging technologies, highly multiplexed *in situ* detection captures the nuances of gene expression by profiling single cells – both common and rare – in their native environment. It's a new dimension of biology that can provide rich insight into how an organism functions.

Why MERSCOPE?

Position yourself at the forefront of scientific discovery with the **MERSCOPE™** Platform, the industry's first high-plex, *in-situ* single-cell spatial genomics solution. MERSCOPE uses MERFISH technology to directly map and quantify the spatial distribution of hundreds to tens of thousands of RNA species in individual cells, without the need for downstream sequencing.

MERFISH technology expands on the capabilities of single molecule FISH (smFISH) by using combinatorial labeling, sequential imaging, and error-robust barcoding to detect RNA with sub-micron accuracy. This gives researchers a window into the intracellular organization of the transcriptome within every cell.

● HIGH CELL THROUGHPUT

- Several hundred thousands of cells

● FLEXIBILITY

- +20 tissue types, including mouse and human
- Fresh, fixed-frozen, FFPE

● MASSIVE MULTIPLEXING

- Up to 500 genes, 1cm² of tissue

● 100nm RESOLUTION

- Single-cell and sub-cellular imaging

● UNPARALLELED SENSITIVITY

- Identifying lowly expressed genes

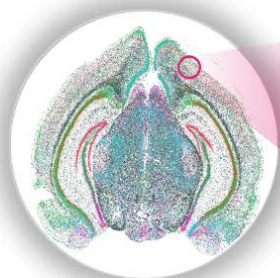
Profile Large Tissue with Subcellular Resolution

With the MERSCOPE platform, Vizgen combines MERFISH technology with high resolution imaging, fluidics, image processing, and automation to deliver a complete end-to-end spatial genomics solution. Your lab can quickly begin generating data with a platform that provides all the components required to obtain and analyze high quality spatial genomic measurements, powered by MERFISH technology.



MERFISH • Multiplexed Error Robust Fluorescence *In-Situ* Hybridization

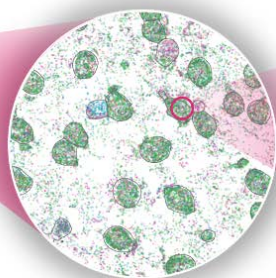
Profiling 483 genes with subcellular resolution across a full mouse coronal slice



WHOLE SECTION

9 x 7 mm

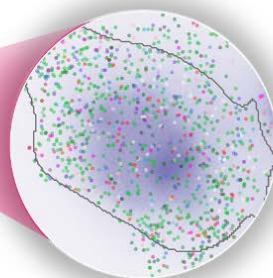
Organization of tissue



WIDE FIELD OF VIEW

200 x 200 micron

Cell interaction/function



SUB-CELLULAR

12 x 12 micron

L2/3 IT Glutamatergic neuron



Nucleic Acid Purification: Pure and Simple®

Extract RNA and DNA from FFPE with Confidence

Introducing Purigen's IONIC® Purification System

The Ionic® Purification System uses the principles of **isotachopheresis** to extract and purify nucleic acids from FFPE samples without binding, washing, or stripping from fixed surfaces. Since nucleic acids are intact and remain in their native form, not denatured or dehydrated, the Ionic system is able to extract higher yields of higher quality total RNA and DNA, ultimately resulting in superior data.



Studies have also shown that the Ionic system is able to extract nucleic acids from FFPE where column- and bead-based methods could not.

Isotachopheresis, a Superior Approach to Nucleic Acid Separation

Isotachopheresis (ITP) separates and concentrates charged molecules in solution solely based on their electrophoretic mobility. Biological samples are gently lysed and added to the Purigen Ionic® Fluidic Chip. An electric field is then applied to the chip and the nucleic acid is isolated in its natural, native form. The nucleic acid is not denatured or dehydrated, and there's no binding to, or stripping from, fixed surfaces. The result is a higher yield of pure nucleic acid that is less fragmented and free from bead or wash buffer contamination.



- **Simplify Lysis**
Deparaffinize, lyse, and de-crosslink in a single reaction without using harsh chemicals
- **Eliminate Bias**
Extract targeted nucleic acid regardless of fragment length or GC content
- **Minimize User Involvement**
Extract and purify 8 samples in one hour with just 3 minutes of hands-on time per sample
- **Improve Reliability**
Minimize user-to-user variability, cross-contamination, and sample loss from wash solvents

Simplified FFPE Workflow < 3 minutes of hands-on time per sample

FFPE Sample



no need to de-paraffinize

1

LYSE



Simple lysis procedure uses a programmable thermomixer to process up to 24 samples in a single run. No separate steps are required to de-paraffinize or de-crosslink samples.

2

PURIFY



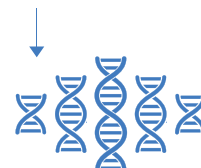
Purify using the Ionic® Purification System

3

COLLECT



Collect pure and native nucleic acid



Higher yield, higher quality nucleic acid

Untangle the Complexity of Cancer with True Multi-Omics

Single-cell DNA sequencing and protein analysis

Introducing the Mission Bio Tapestri Platform



The Mission Bio Tapestri Platform is the only system capable of simultaneously providing both genotype and phenotype data from the same cell, across thousands of single cells.

simultaneous single-cell DNA and protein analysis, configure your own antibody cocktail from a growing catalog of pre-optimized antibody oligonucleotide conjugates (AOC). Or, start with the pre-designed 45-protein TotalSeq™-D Heme Oncology Cocktail. TotalSeq™ oligo-conjugated antibodies from BioLegend integrate seamlessly into the Tapestri single-cell DNA sequencing workflow to amplify the power of single-cell analysis.

Mission Bio Tapestri is a targeted solution for:

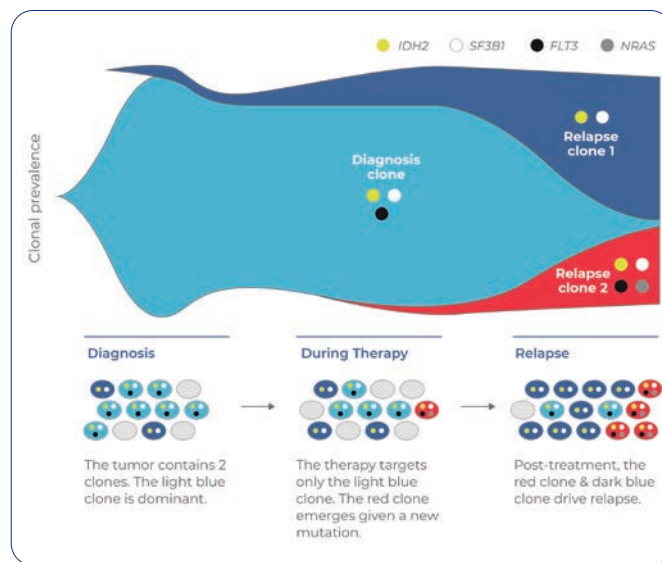
- Hematologic Malignancies
- Solid Tumor Profiling
- Genome Editing Validation
- Custom-designed Solution

Load your cells on the cartridge and use the proprietary two-step microfluidic workflow of the Tapestri for single-cell encapsulation and barcoding. Sequence the genomic regions of interest and the oligo-tagged antibodies bound to the same single cell to track clonal evolution, reconstruct phylogenetic trees, uncover zygosity and mutation co-occurrence, reveal therapy resistance mechanisms, and monitor disease during remission to track MRD (minimal residual disease).

Obtain multiple analytes from a single cell:

- Single nucleotide variants (SNVs)
- Copy number variations (CNVs)
- Protein expression

You can run targeted single-cell DNA panels with catalog and customizable content, so you can focus on the mutations and regions of interest that are most informative for your disease research. For



- **NEW:** do more single cell with less – 20,000 cells input possible
- Single-cell DNA & protein analysis from up to 10,000 single cells
- High sensitivity for rare clones – down to 0.1%
- Intuitive software for panel design, data analysis and visualization
- Compatible with TotalSeq™-D antibody content from BioLegend

TARGET SELECTION

CHOOSE A PRE-DESIGNED OR CUSTOM DNA PANEL



SAMPLE PREP

ADD A PROTEIN PANEL AND SIMPLE CELL STAINING PROTOCOL



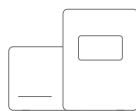
LIBRARY PREP

SINGLE WORKFLOW COMBINES DNA AND PROTEIN PANELS



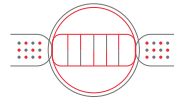
SEQUENCING

SINGLE SEQUENCING RUN FOR MULTI-OMICS SINGLE-CELL DATA



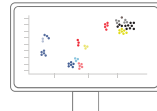
PIPELINE

INTEGRATED PIPELINE FOR MULTI-OMICS ANALYSIS



ANALYSIS

POWERFUL ANALYSIS AND VISUALIZATION SOFTWARE

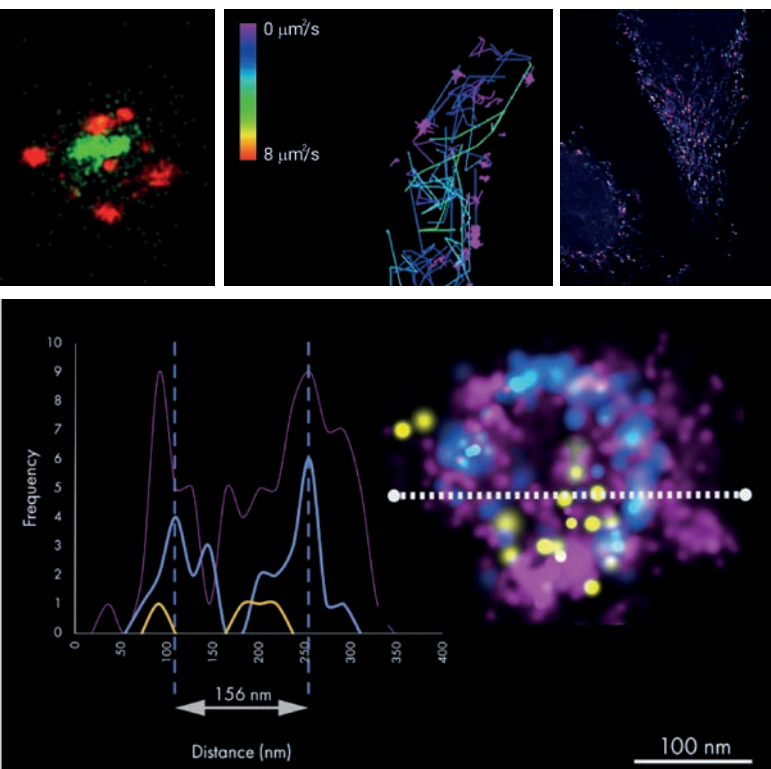


astONshing

Single Molecule Imaging at your Lab Bench

Meet the Nanoimager

The Nanoimager of Oxford Nanoimaging (ONI) is the world's first, desktop-sized microscope capable of observing individual molecules within living cells. It offers various modes of operation including dSTORM, PALM, smFRET and supports illumination modes from epifluorescence to TIRF. With this range on offer, it's easier than ever to get the most out of fluorescence microscopy, both when imaging fixed samples stained with immunofluorescence protocols or during live-cell imaging.



Advanced Microscopy For All

Created by scientists for scientists, the Nanoimager delivers the highest precision for single molecule and advanced imaging.

This highly sophisticated research tool enables super-resolution applications dSTORM, PALM and single particle tracking with ultimate precision, even at 20 nm scale, by stabilizing both drift and vibrations. Integrated analytics tools deliver faster, accessible data even before your task completes.

Proven in the lab

The Nanoimager has earned its place in the great seats of academia and research. Hoffmann-La Roche, Univ. Zürich, the University of Cambridge, Harvard and Cancer Research UK are just a few of the users deploying the Nanoimager for diverse applications in microscopy.

● Single-Particle Tracking

- Microfluidics compatible
- Whole body heating
- Dedicated tracking analysis

● dSTORM & PALM

- Resolution up to 20 nm
- Real time rendering
- 3D imaging

● Single-Molecule FRET

- Interactions within 1-10 nm range
- Individual and group events
- Dedicated smFRET analysis

● Unique, compact design

- Compatible with BSL3 safety cabinets
- Minimal space requirements in BSL4 facilities

Interested in evaluating super-resolution microscopy?

Nanoimager Applications

- Tracking Viral Particles & Extracellular vesicles
- Protein Complex Assembly
- Host Pathogen Interactions
- Single Molecule Tracking
- Quantitative Cellular Imaging
- Molecular Mechanisms and Interactions

Healthy Cells. Better Science.

Cell Sorting made for every lab

Introducing the NanoCollect WOLF® G2 Cell Sorter

The WOLF G2 instrument has significantly expanded the capabilities of gentle benchtop microfluidic cell sorting with two lasers and up to nine colors, while maintaining simple workflows for either bulk sorting or single-cell dispensing. Single-cell sorting can be completed in 96- or 384-well plates when using the WOLF G2 in conjunction with the N1 Single-Cell Dispenser. This flexibility in performance makes it ideal for use in many different research fields and application areas like single-cell genomics, cell line development, gene editing, antibody discovery, immunology, infectious disease, basic research, and more.

Microfluidic Cartridges

Unique to NanoCollect are disposable cartridges that allow for bulk sorting or single-cell sorting. The sorting cartridges use a piezo-acoustic actuator that gently directs cells into collection channels; an embedded cell sorting verification system gives instant feedback of sorting accuracy. And because the cartridges are disposable, there is no chance of sample-to-sample contamination or biohazardous aerosols.

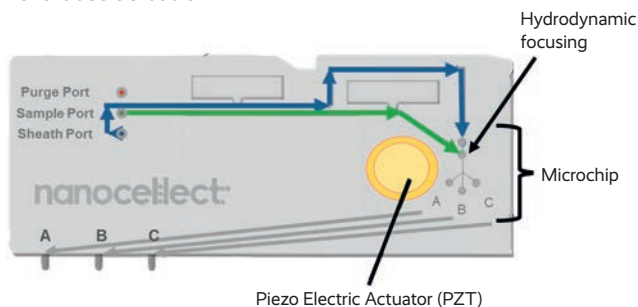


Figure: Sample solution (green line) and sheath fluid (blue line) travel through their own respective channels within the cartridge ultimately mixing at the microchip.

New! CS1 Chiller-Stirrer Accessory

Applications with temperature sensitive samples, like Stem Cells or Neuronal Cells can be challenging to sort. Such applications would benefit from modules such as the CS1 Chiller-Stirrer by keeping both sheath fluid and sample at the desired temperature during the sorting process.



Additional to the cooling mechanism, the CS1 Chiller-Stirrer can provide stir function for samples that settle quickly or aggregate. This will maintain single-cell suspension which will improve sort recovery and purity.

Cell sorting has never been so easy!



Healthy Cells

At < 2 psi, the WOLF G2 are gentler than any conventional cell sorters, enabling healthier cells post-sort, especially for engineered lines, primary cells, and stem cells.



High sensitivity and resolution

All laser configurations afford < 250 MESF sensitivity, along with forward and back scatter, providing as low as 1 μm resolution.



Compact and at your bench

At 2 cubic feet, NanoCollect's benchmark for access and performance allows every lab for the flexibility to do analysis and sorting into tubes or 96- and 384-well plates.



Simple and intuitive

Intuitive software, fixed optics, no fluidics cart and less than one minute clean-up time.



Contaminant- and biohazard-free

Disposable, aerosol-free microfluidic cartridge allows for sterile sorting that protects the sample from the environment and scientist from the sample.



Expanding the WOLF's capabilities

With up to two lasers and up to nine fluorescent channels, the WOLF G2 aligns with a broad set of research applications and experiments. Three different laser configurations allow options specific to your needs.

Healthy Cells. Broad Capabilities. Better Science.

Tired of Adapting your Experiment to the Vessels Compatible with your Sampler?

Introducing the Agilent NovoCyte Penteon™, Quanteon™ and Advanteon™

The NovoCyte Penteon™, NovoCyte Quanteon™, and NovoCyte Advanteon™ flow cytometers build on their successful predecessor, the NovoCyte, to provide an expanded set of capabilities that accommodate today's high-end and increasingly sophisticated multi-color flow cytometry assays. Scientists now have the flexibility to choose from up to 30 fluorescent channels utilizing 1–5 lasers with up to 30 independent detectors.

The NovoSampler Q™, which can be integrated into different laboratory automation platforms, efficiently processes both FACS tubes (using a 40-tube rack), Eppendorf tubes, and 24-, 48-, 96-, and 384-well plates. **It is the only sampler that adapts itself to your desired vessel type.** The intuitive and industry leading NovoExpress® software has been further advanced, providing an exceptional user experience in data acquisition, analysis and reporting.

Walk-away Automation Simplifies Your Workflow

Easy startup & shut down: Quick startup with automated fluidic rinsing takes only minutes to prepare the instrument for your daily use. The configurable pre-scheduled shutdown thoroughly cleans at a specified time each day to eliminate the hassle of end-of-day manual cleaning.

Embedded quality control: Quickly run daily QC, automatically generate comprehensive QC reports, and conveniently track performance over time with Levey-Jennings plots. The automatic QC test ensures proper performance monitoring on not only a day-to-day basis, but also over long-term use.



Flow Cytometers with Exceptional Reliability:
Agilent's NovoCyte Penteon, Quanteon and Advanteon

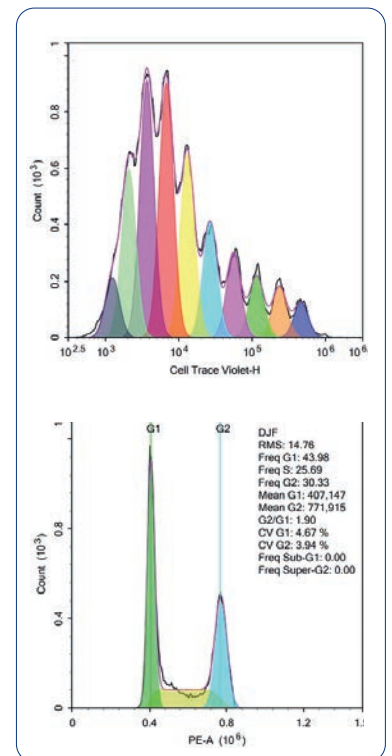
Continuously monitors fluidic levels for you: A fluidic station capable of sensing low fluid or high waste levels eliminates the need of manual inspection. Fluidics consumption is estimated before plate runs to ensure uninterrupted sample acquisition.

Hassle-free fluidics: Electronically monitored valves and sensors allow for automatic clog detection and recovery. A feedback control system continuously manages sheath flow rate to maintain great stability.

Consistent results, fast or slow:

Equipped with high quality lasers, optical filters and detectors to ensure consistent signal detection, and combined with fluidic feedback control mechanisms to maintain steady flow rates, the NovoCyte systems are the flow cytometers you can always rely on.

NovoCyte Systems have demonstrated superior stability across a wide range of sample flow rates, a critical requirement for a high end flow cytometer to provide consistent results under variable operating conditions. The NovoCyte family gives you peace of mind so you can focus more on your experiments.



Advanced Data Analysis made easy by NovoExpress®

- Cell Proliferation Modeling
- New Cell Cycle Analysis Module
- Heat-map Data Display

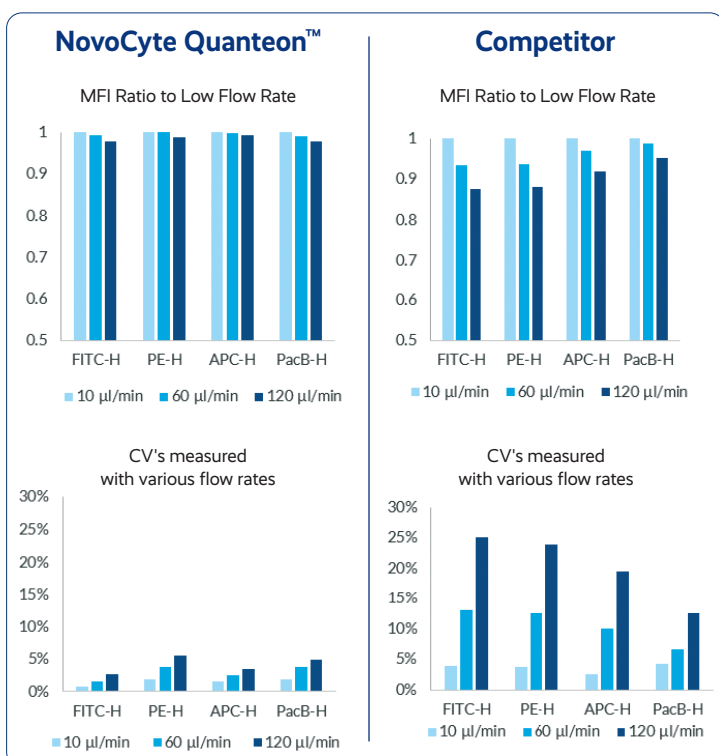


Image – Identify – Isolate

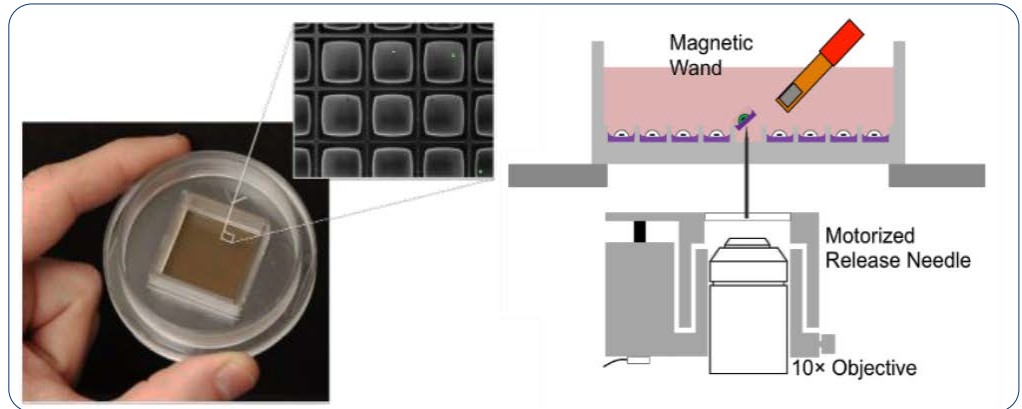
Single cell analysis with image-based cell isolation

Introducing the CellRaft AIR® by CELL Microsystems

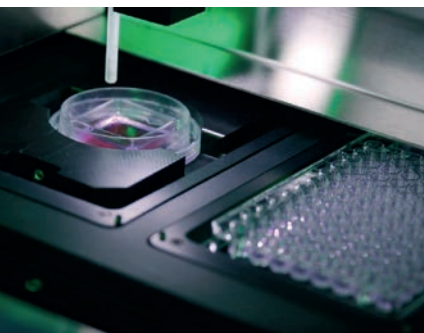
Cell Microsystems has developed the CellRaft® AIR System to allow imaging-based cell sorting and isolation of single living cells prior to downstream analyses. The AIR System is a bench-top instrument comprising an internal microscope with both brightfield and three-channel fluorescent imaging capabilities.

CellRaft® AIR addresses two widespread challenges scientists are facing in single cell biology research: the ability to image, identify, and for isolation, actively select viable single cells or clonal colonies based on their phenotype.

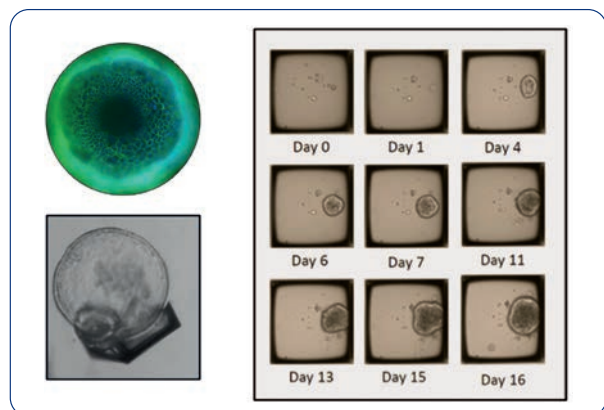
The technology builds on a disposable microwell array on which cells are seeded and imaged. While the array can be handled as common culture plates with cells seeded in bulk and sharing the media, the bottom of this dish contains thousands of rafts to which cells will attach.



- Grow Organoids with the CellRaft Air
- Serial imaging over time
- On-array phenotypic assessment
- Automated isolation of intact 3D structures
- Isolate organoids at multiple timepoints



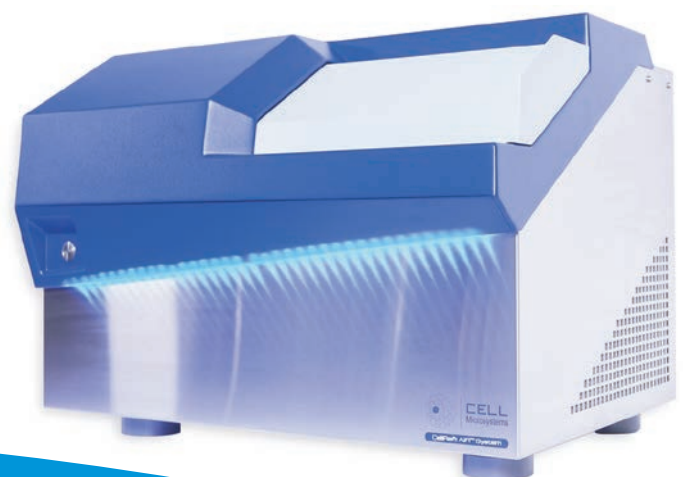
Upon imaging, the software allows either user-specified selection of cells to be collected as individuals or to automatically collect cells based on desirable characteristics according to fluorescent markers. Rafts with cells of interest are isolated with a motorized needle and transferred with a magnetic wand into a collection plate.



Life science researchers can functionally and phenotypically characterize their cells in real time prior to isolation using a single consumable. Proven monoclonality with greater yields accelerates the path to drug discovery and new therapies.

Accelerate your research by saving money, time and plastic with the CellRaft AIR system.

Interested in an exciting new way of cell line and organoid generation?



Isoplexis – The Superhuman Cell Company

Function Mapping Reveals Each Cell’s Superpowers

Introducing the Isoplexis IsoLight and IsoSpark Systems

Isoplexis' functional phenotyping reveals the rare subsets of cells that simultaneously secrete multiple cytokines. These polyfunctional cells are responsible for orchestrating immune responses and are predictive of patient response and disease progression *in vivo*. Unmasking these highly polyfunctional cells is imperative in accelerating the development of advanced, curative medicines. Isoplexis developed a new library of cells characterized by functional proteomics to complement the genomic-based Human Cell Atlas. The Functional Cell Library (FCL) adds a unique layer of proteomic data on the wide range of superpowered immune and tumor cell types uniquely identified by Isoplexis' single-cell functional proteomics.

Functional Immune Landscaping

Accelerate the ability to clarify lead candidate choice and durable biomarkers using the proteomic secretome from each single cell to accelerate the path to higher efficacy with targeted immune therapies.

Intracellular Signaling Omics

Identify adaptive phosphoproteomic signaling networks from rare subsets of single cells, targeting the entire set of signaling pathways to eliminate resistance and metastases.

High-Plex Walk-Away Immunoassays

For the first time, unleash walk-away multiplexed proteomics in very low sample volumes, with an analytics suite that saves resources and time while delivering key omic insights.

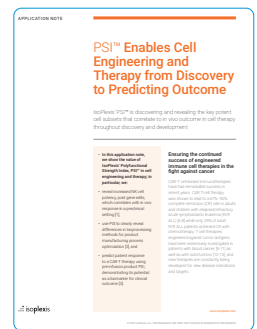
Isoplexis' mission is to leverage the superhuman cells in all of us to change the course of human health. The Functional Cell Library provides the bridge to leverage unique functional phenotyping data to patient responses *in vivo* for translational and clinical applications. IsoLight and IsoSpark systems, which uniquely reveal these superhuman cells through single-cell and proteomic innovations, are enabling customers to advance the future of medicines against complex diseases.

PSI™ Enables Cell Engineering and Therapy from Discovery to Predicting Outcome

Learn how Isoplexis' polyfunctionality strength index PSI helps you discover and reveal the key potent cell subsets that correlate to *in vivo* outcome in cell therapy throughout discovery and development.

In this Application Note you'll find:

- Use Polyfunctionality and PSI to reveal synergies and mechanism with novel Combination Therapies
- Use PSI to clearly reveal differences in bioprocessing methods for product manufacturing process optimization
- Predict patient response to a CAR-T therapy using pre-infusion product PSI, demonstrating its potential as a biomarker for clinical outcome



Supercharged Immunology
SUPERHERO CELLS

Cells responsible for orchestrating an immune response *in vivo* and whose function is predictive of patient response and survival.

Hyper Inflammation
SUPERVILLAIN CELLS

Cells responsible for promoting disease *in vivo* and whose function is indicative of inflammation and toxicity.

Aberrant Malignancies
SUPERVILLAIN CELLS

Tumor cells whose functional proteomic phenotyping provide insight into therapeutic resistance and disease progression.

"Polyfunctional Cells are the Subsets with Superpowers."

Rong Fan, Ph.D.

Associate Professor of Biomedical Engineering at Yale and co-founder of Isoplexis

Multicolor Fluorescence Imaging and Data Analysis in one Device

Logos Biosystems' CELENA® S Digital Imaging System

The CELENA S is a powerful digital imaging system that simplifies imaging and data analysis. Integrating advanced precision optics, a highly sensitive scientific grade CMOS camera, and a computer with user-friendly software, the CELENA S allows researchers to capture vivid, publication quality images with ease. Interchangeable objectives and filter cubes accommodate a wide range of imaging needs. Researchers can use the CELENA S for multiple applications, such as capturing and analyzing multicolor fluorescence

images, live cell imaging, and automated cell counting.

Are you curious to see the system or even better to see your cells or samples right on the system?



Multicolor Fluorescence and Brightfield Imaging

Long-lasting LEDs and hard-coated optical filters ensure robust fluorescence imaging. Adjustable LEDs allow precise control over the gain and intensity of transmitted light.

Onboard Data Analysis

Analyze your images immediately upon capture. Save measurement data to a USB drive.

Live Cell Monitoring

Monitor live cells with the time lapse function or the growth monitor. Attach the onstage incubator to control the temperature, humidity, and CO₂ / O₂ levels.

Z-stack Imaging

Capture multiple images along the Z-axis with the Z-stack function.

Automated High Content Imaging Acquisition & Analysis for Drug Discovery & Cell Biology

Logos Biosystems' CELENA® X

The CELENA® X High Content Imaging System is an integrated imaging system designed for rapid, high content image acquisition and analysis. Customizable imaging protocols, image-based and laser autofocus modules, and a motorized XYZ stage simplify well plate imaging and slide scanning. It is as flexible as powerful, with interchangeable objectives and LED filter cubes to accommodate a wide range of fixed and live cell imaging applications.

Applications:

- Cell-Based Assays
- Cell Counting
- Drug Discovery
- Histology
- Live Confluency Monitoring

Key Features:

- Easy to customize for microfluidic devices
- Fully automated image acquisition and analysis
- Rapid multi-well plate imaging
- Powerful cell based assay software package
- Area scanning & image stitching
- Z-stacking & focus merging
- Time lapse live cell imaging
- Whole slide imaging

We are looking forward to your call in order to discuss your specific application!



Sample to Genomics Solution

Single Cells or Nuclei from Solid Tissues in Minutes

Introducing S2 Genomics' new Singulator™ 200




S2 Genomics is developing integrated sample preparation systems for processing tissues into genomic samples for single-cell genomics and cell biology studies. The Singulator enables rapid and hands-off tissue dissociations, making it easy for researchers to reproducibly prepare suspensions of nuclei or highly viable cells from small samples in high yield, for a wide range of single-cell analyses.

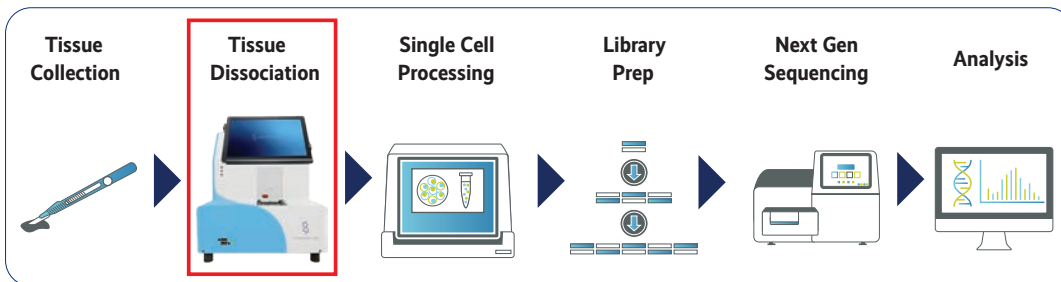
The Singulator 100 and 200 overcome the challenges of manual tissue preparation methods by producing consistent cell or nuclei isolations from a variety of solid tissue samples, reducing hours of hands-on processing to minutes. Its ability to perform cold dissociation minimizes the expression of stress-related genes in cells and helps preserve RNA quality in nuclei.

Unlock Precious Tissue Samples

Singulator utilizes patent-pending single-use cartridges to dissociate solid tissues into suspensions of single cells or nuclei.



-  **Independent Bays**
Independently addressable sample bays. Isolate cells or nuclei from either bay at any time.
-  **Rapid Results**
Nuclei in ~7 minutes. 8 samples complete in ~30 minutes.
-  **Easy to Use**
Get great results on day one. Robust protocols are pre-loaded and easily optimized for new tissue types.



The newly introduced NIC+ small sample cartridge is ideal for ultrasmall, precious samples of 1 - 20 mg. Its performance has been demonstrated for as small as 1mg of tissue for nuclei isolations.

With Singulator, researchers can now easily obtain suspensions of nuclei or high-viability single cells for a wide range of single-cell analyses.



- Proven Technology
- Flexible Automation
- Higher Throughput

Your samples, your expertise, your choices!

UPCOMING EVENTS



Please visit us at these events:

- **WIRM 2023**
World Immune Regulation Meeting
Davos, 5. - 8. July 2023
- **ISREC SCCL Symposium 2023**
Lausanne, 21. - 24. August 2023
- **Next Gen Organ-on-Chip & Organoids 2023**
Technopark Zürich, 24./25. August 2023
- **Annual Congress Swiss Society for Microbiology**
Univ. Hospital CHUV, Lausanne, 30./31. August 2023
- **Swiss Physiology Meeting 2023**
UniS of the University of Bern, 6. September 2023
- **ILMAC Lausanne 2023**
Conventione Center Basel, 26. - 28. September 2023

Next Generation Cell Counters

The Champion's Way of Cell Counting. Because Time is Power!

Logos Biosystems' Luna™ Automated Cell Counter Series



The popular LUNA™ Family of Automated Cell Counters

This highly advanced product family of automated cell counters is used by highly satisfied researchers in numerous labs worldwide.

The **LUNA-II™ Automated Cell Counter** with unmatched speed, accuracy, and consistency of measurement, is a stand-alone instrument integrating precision microscopy optics, onboard computer, image analysis software, autofocus system, and built-in printer.

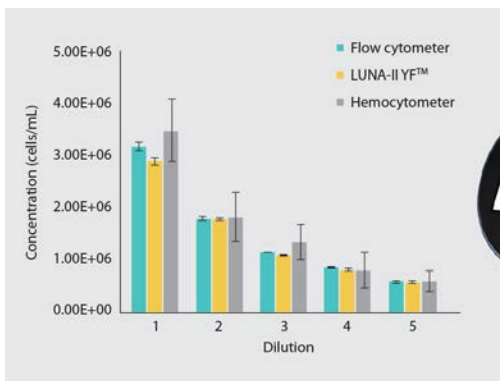


The LUNA-II automated cell counter accurately detects total/live/dead cells at concentrations ranging from 5×10^4 to 1×10^7 cells/mL and cell sizes between 3 and 60µm, using brightfield imaging.

Yeast Cell Counter LUNA-II YF™

Yeast counting has never been this fast and easy. The LUNA-II YF is a fully automated, image-based yeast cell counter. Dual fluorescence optics, an autofocusing liquid lens, and an advanced counting algorithm produce yeast cell count and viability data in just 15 seconds.

No more subjectivity and wasted time on manual cell counting. LUNA-II YF counts yeast cells stained with fluorescent nucleic acid dyes with the precision and consistency of a flow cytometer, but in a much shorter time.



Accuracy and precision of the LUNA-II YF™ Automated Yeast Cell Counter compared to flow cytometry and glass hemocytometer counting methods



LUNA-FL™ Dual Fluorescence Cell Counting

A quantum leap for automated cell counting and cell viability analysis. The LUNA-FL automated cell counter gives you sensitive and accurate live/dead cell counting results without limitation of cell types.



The LUNA-FL inherited the proven performance of the LUNA Automated Cell Counter with the brightfield microscope optics and the powerful and accurate cell counter algorithm. The integrated dual fluorescence microscope optics of the LUNA-FL allows you to precisely stain live / dead cells and thereby exclude undesirable debris. Resulting in the most accurate cell counting experience ever!

All our cell counters are compatible with the reusable slide for sustainability.



Rapid and Accurate Single Bacteria Cell Quantification

The QUANTOM Tx™ Microbial Cell Counter is an image-based, automated cell counter that can count individual bacterial cells in mere minutes. The sophisticated QUANTOM cell counting algorithm is the first of its kind, capable of detecting individual bacterial cells regardless of their diverse morphologies and arrangements. Multiple images of fluorescence-stained cells are captured and analyzed automatically for rapid and accurate bacterial cell counts.

Please contact us in order to discuss your specific cell counting requirements.

Every Cell Matters

A Busy Bio-Lab needs an efficient Cell Counter



Logos Biosystems' LUNA-FX7™ Automated Cell Counter



Introducing the LUNA-FX7 - the automated cell counter that builds on the success of its predecessors. The LUNA-FX7 is our most powerful cell counter, with unmatched cell counting accuracy, a maximum counting volume of 5 μ L (10 times that of conventional cell counters), all new optics, dual fluorescence and brightfield illumination, a fast and precise autofocus, and multichannel pipette-ready 8-channel slides to count up to eight sample simultaneously. To help monitor and optimize bioprocess-

es, the LUNA-FX7 has built-in quality control features and precision validation slides. 21 CFR Part 11-ready, the LUNA-FX7 improves the security and efficiency of your lab's workflow.

Unmatched cell counting accuracy

- All-new optics
- Increased counting volume for the lowest CV per count
- Multichannel pipette-compatible 8-channel slides
- Fast and precise autofocus
- More robust and sophisticated counting algorithms
- Customizable cell-detection protocols

Optimized for bioprocess production applications

- Quality control and validation software
- Range of standard validation slides

21 CFR Part 11 ready

- User access and rights management
- Online data storage and control
- Encrypted electronic records



LUNA FX7™ Automated Cell Counter					
	NEW				
	LUNA™ 1-Channel Slides	LUNA™ 8-Channel Slides	LUNA™ 3-Channel Slides	LUNA™ Cell Counting Slides / PhotonSlides™	LUNA™ Reusable Slides
Compatible slides					
Sample throughput	1 sample	Up to 8 samples	Up to 3 samples	Up to 2 samples	1 sample
Sample loading volume	50 μ L	10 μ L / chamber	10 μ L / chamber	30 μ L / chamber	10 μ L
Maximum analysis volume	5 μ L	0.5 μ L / chamber	1.3 μ L / chamber	1.3 μ L / chamber	1.3 μ L

Optimized Microplate Solutions

Microplates are the Currency of the Lab!

Agilent's standard and custom Microplate Solutions

Did you know that Agilent is a worldwide leader in the design and manufacturing of high-quality microplates for biological research and drug discovery?

Agilent provides standard and custom solutions for academic and government institutions and pharmaceutical and biotech organizations, as well as large and small OEM manufacturers of assay kits

and lab instruments suppliers. All of Agilent's products are designed and built to obtain the highest quality results.

- Storage / Assay Microplates
- Filter Plates
- Reagent Reservoirs
- Customized Microplates – Tell us what you need!



Simply check the online Product Selection Tool via www.agilentmicroplates.com or contact us to receive a copy of the Agilent Microplate Solutions brochure.



Cell Separation Made Simple!

Isolate your specific cells without the need for centrifugation or Ficoll

Introducing the MARS™ Platform by Applied Cells

The new MARS™ Platform: The only instrument to offer acoustic technology for sample preparation AND magnetic cell isolation technology for cell separation in one easy-to-use system.

With the MARS platform, Applied Cells developed a novel technology to standardize and automate cell preparation from complex samples such as whole blood, bone marrow or cancer tissue using an acoustic active-microfluidic chip to wash and remove red blood cells, debris, free dyes or other small particles. The proprietary method presents a unique advantage in enrichment of target cells, including rare tumor cells and immune cells with high recovery.

Cell Therapy

Modular systems automate cell processing and cell isolation in the development and manufacturing of cell-based drugs. MARS provides both high recovery and purity.

Tumor Biology

TIL, T Cells, NK cells, Neutrophils or Stem cells.

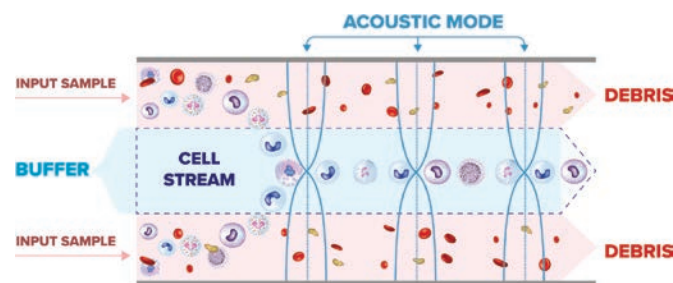
Genomics

Label-free, easy and fast enrichment of live single cells from samples including peripheral blood, bone marrow, solid tissue and many others.

The MARS experience offers:

- Consistent and reproducible results
- High recovery AND high purity
- A matrix-free continuous flow system with virtually no loss of cells
- Rare cell isolation (1 in 5 million bone marrow cells)
- High sensitivity MRD (minimal residual disease) isolation
- Stem cell isolation
- T cell isolation
- TIL and tumor cell isolation

The MARS family of instruments provides a breakthrough solution to complete the workflow of cell separation and enrichment. Applied Cells' proprietary technology offers a unique advantage in the enrichment of target cells with high recovery, high purity and high reproducibility.



MARS CS

Acoustic modules for sample washing and concentration combined with the magnetic module for positive or negative cell selection



MARS BAR

Magnetic technology for positive or negative cell selection



MARS SP

Acoustic technology for cell washing and cell concentration

Discover the Power of Cellular Energy Metabolism

Agilent's Seahorse XF Pro Analysis Platform

Energy metabolism plays a central role in a wide variety of cellular and physiological processes. How energy metabolism is programmed in cells not only can serve as a key indicator of cell health, but it also can be a powerful predictor of cell fate, function, and fitness. Such knowledge provides deep insights into the processes behind activation, proliferation, differentiation, and cell death, thus advancing science and assisting therapeutic discovery and development.

The Agilent Seahorse XF analyzer revolutionized the measurement of bioenergetics in live cells in real time. Now, we've built upon that success with the Seahorse XF Pro platform. It combines enhanced instrument sensitivity and data consistency with intuitive custom workflow solutions and advanced experimental design and data analysis tools.

What sets Agilent Seahorse XF Pro apart?

- **Better precision at low OCR.**
Confidently interrogate more immune cell types, as well as cell types that are bioenergetically compromised.
- **Verified instrument performance.**
Maintain consistent XF data from plate to plate with verified CV% and standard deviations for OCR/ECAR/PER rates.
- **Wave Pro data quality view.**
Automatically flag erroneous data and more easily reject outliers.
- **Optimized temperature control.**
Control edge effects when combined with the new Agilent Seahorse XF Pro M cell culture plate.
- **Automation enabled.**
Software is designed to communicate with automation integration software.
- **Analytical instrument qualification (AIQ) service.**
Ensure proper instrument performance through customer acceptance criteria and documentation.



Newly updated end-to-end solution for performing, interpreting, and determining cell function

Agilent Seahorse Wave Pro software

Import assay conditions and plate map layouts, reduce data complexity with automated and interactive data quality analysis report



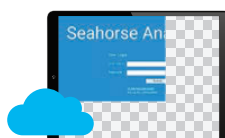
Agilent Seahorse XF Pro analyzer and controller software

Improved sensitivity and precision for OCR, improved usability and temperature performance, verified optimal OCR and PER measurement ranges, automation-ready



Agilent Seahorse Analytics

New data visualizations and customizable analysis templates facilitate decision making, compile and summarize result data from multiple XF assays



New Agilent Seahorse XF consumables

XF Pro M fluxpak and plates designed to limit edge effects for larger screens, 96-well hydrobooster for improved sensor calibration, XF Mito Tox Assay kit, XF T Cell Metabolic Profiling kit



Enabling Exosome Discovery

Accurately Detect & Fully Characterize Extracellular Vesicles & Viruses!

Meet the ExoView® R200 Platform from Unchained Labs



Another step forward in characterization in the extracellular vesicles (EV) field, the fully automated ExoView platform provides multi-level and comprehensive EV measurement of EV size, count, phenotype, and biomarker colocalization. The ExoView platform provides previously unattainable information in a single, bias- and purification-free workflow. ExoView R200 is an affinity-based technology that allows specific populations of EVs to bind in a multiplexed manner to a functionalized ExoView micro-array chip, using 35µL of sample volume only.

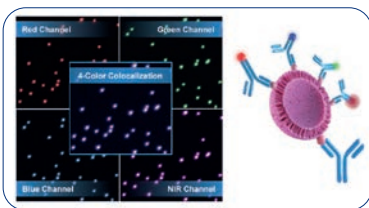
Characterize samples based on EV size distribution and count

ExoView quantifies EV sub-populations defined by surface markers. The platform counts EVs specifically, directly in the unprocessed sample and excludes any contaminants, enabling EV quantification without purification. Linear range spans 3 orders of magnitude. In addition, EVs as small as 50 nm in diameter can be analyzed with excellent peak-to-peak resolution in heterogeneous samples.

Characterize EVs based on unique protein signatures

NanoView Biosciences provides the ability to measure up to **5 markers on a single extracellular vesicle**. To assess protein

expression profile, both surface and luminal markers can be measured, while the EVs are simultaneously counted and sized. Detect low-abundance proteins on the smallest EVs.

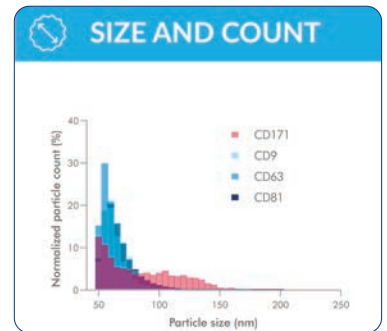


Sample Matrices

- Blood plasma
- Blood serum
- Cerebrospinal fluid (CSF)
- Cell culture with or without bovine EVs
- Saliva
- Urine Follicular fluid
- Synovial fluid
- many more...

Characterize EV subpopulations from multiple samples

In the ExoView workflow, EVs are captured on a microarray chip using antibodies. Subsequent EV permeabilization allows staining and probing of cargo proteins at the single-EV level. ExoView single-molecule sensitivity enables detection of even the smallest EVs with low protein expression.



Detect EV subpopulations from multiple samples

In the ExoView workflow, EVs are captured on a microarray chip using antibodies. Subsequent EV permeabilization allows staining and probing of cargo proteins at the single-EV level. ExoView single-molecule sensitivity enables detection of even the smallest EVs with low protein expression.

Custom antibody capture for detection of rare, disease-specific EVs

Use the universal **ExoFlex®-Kit** to utilize your own, proprietary antibodies against your protein of interest for the capture of **disease-specific EVs**. Characterize multiple populations of EVs from a single sample and benefit from automated washing, staining and analysis of up to **16 samples simultaneously**.

The fully automated instrument can measure complex samples without the need for purification, while reducing costs, saving time, and eliminating purification biases. The new chipwasher reduces hands-on time for 16 samples to under 5 minutes!

Introducing the new LentiView™-Kit

Working with lentiviruses? With the R200 you can easily:

- Measure virus particle titer
- Measure virus particle size
- Discriminate lentiviruses from contaminant extracellular vesicles
- Determine the ratio of lentiviruses with or without capsid proteins

Contact us in order to learn how the ExoView can help you identify unique EV populations.

- Automated Analysis Of Up To 16 Samples
- Single EV Analysis Of Up To 5 Biomarkers
- 4 Fluorescence Channels
- Detect Exosomes As Small As 50 nm
- High Speed Data Collection
- Virus Detection

KEY FEATURES