

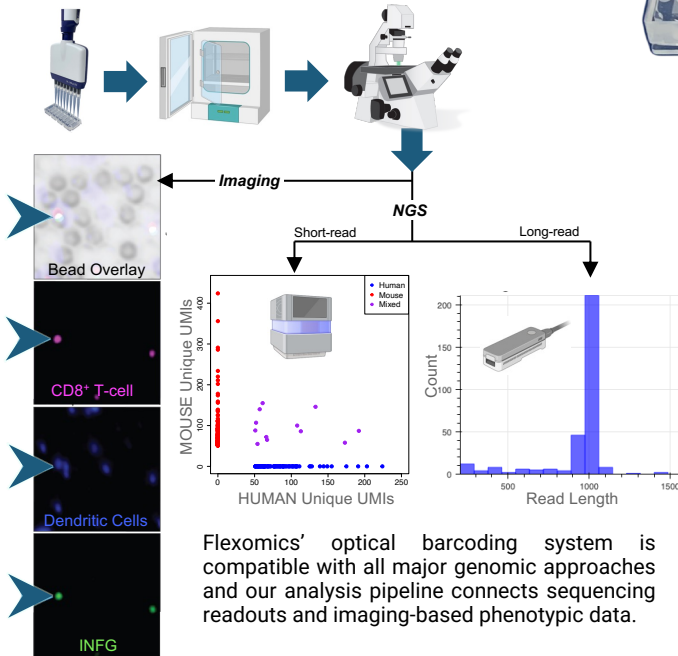
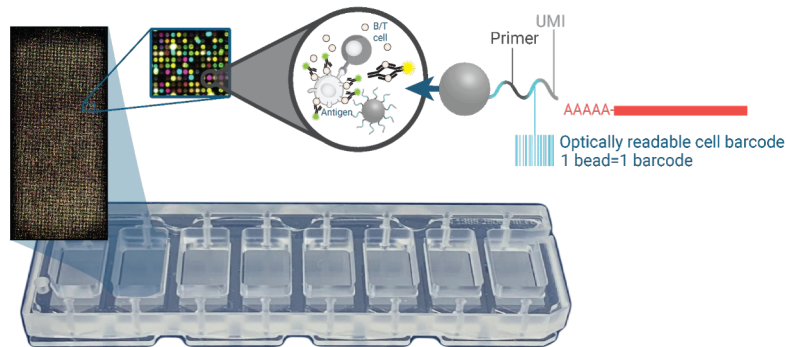
Mining Tomorrow's Medicines, One Cell at a Time

TECHNOLOGY HIGHLIGHTS

- The Flexomics platform combines **imaging** and **sequencing** readouts at **single-cell resolution**
- Our easy-to-use picowell consumable chip enables **live-cell biology** and **functional assays** at scale
- Streamlined workflows complement **imaging-based phenotypic** data with **state-of-the-art genomic readouts**

Our FLEX picowell consumable chip allows you to capture and query live cells by miniaturizing your favorite assays on 10,000s to 100,000s of individual cells. You can even combine fluorescent imaging-based findings with single cell transcriptomic readouts thanks to our pre-loaded optically encoded capture beads.

With its slide format and simple diffusion-based approach, our FLEX chip seamlessly integrates into existing imaging workflows. Simply add your cells to conduct the miniaturized single-cell assay of your choice.



Flexomics' optical barcoding system is compatible with all major genomic approaches and our analysis pipeline connects sequencing readouts and imaging-based phenotypic data.

The FLEX Advantage

- **"BYOA: Bring-Your-Own-Assay"**: Seamless integration with your existing imaging and molecular workflows
- Perform **live functional assays on up to 300,000 cells** in a single run (e.g. *immunofluorescence, cytokine secretion, proliferation and survival assays*)
- Choose from a **broad range of genomic workflows** (e.g. *whole transcriptome / targeted scRNA-seq, TCR/BCR-seq, isoform analysis*)
- **No custom equipment required**
- Leverage our team of **FLEXperts** to adapt the platform to your needs



Bring-Your-Own-Assay

One easy-to-use chip, a **FLEX**iverse of possibilities

Live cell assays

Fluorescent proteins? Cell surface markers?
We can image that!

Culture cells directly on the FLEX chip to easily enable monitoring of cell-cell interactions, cytokine secretion, neoantigen discovery, cell survival, and more.

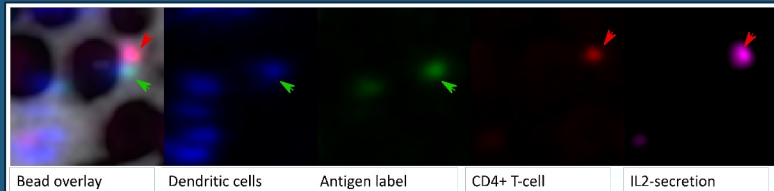


Figure 1. Cytokine secretion assay was performed on the FLEX chip. CD8⁺ T-cells were activated by co-loaded dendritic cells that had been pulsed with the control CEF pool. Antigen-specific CD8⁺ T-cell activation was monitored by IL-2 secretion using Miltenyi's IL-2 secretion assay.

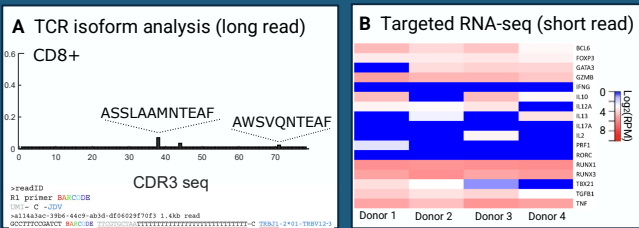


Figure 2. Immune repertoire profiling was performed on CD8⁺ cells isolated from PBMCs. TCR isoform analysis was performed using Oxford Nanopore long-read sequencing (A), while targeted gene expression data from the same cells was obtained using Illumina short-read sequencing (B).

Next-Generation Sequencing

Collect high-quality whole transcriptome or targeted sequencing data from up to 300,000 cells per chip. Compatible with long-read and short-read sequencing platforms.

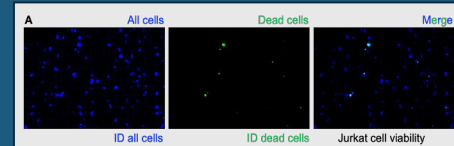
Analyze alone or combine with live cell imaging data for even greater insights. Imaging data can even be used to select which cells you want to sequence.

Bring-Your-Own-Assay

Our universal picowell chip is readily compatible with existing downstream workflows. Take your favorite workflow even further by customizing your assay on the Flexomics platform:

- Hassle-free customization of molecular and cellular workflows
- Compatible with conventional cell culture methods and inverted microscopes
- Obtain simultaneous high-dimensional imaging and sequencing data at single-cell resolution
- No droplet generators or cell sorters required

Figure 3. On-chip cell cultures show high viability of primary and immortalized cell lines for at least 4 days in a conventional CO₂ incubator.



On-Chip Culture Viability		
	16 hours	4 days
Total cell #	16,054	21,596
Dead cell #	539	1,886
Viability	96.6%	91.3%

Interested? Contact us at: info@flexomics.com

What's your **FLEX**?

Take our quick survey

