

Revolutionizing Organoid Workflows: Rapid Formation and Superior Purity

The Highest Value Proposition: Forming Pure Organoids in Hours

The LeviCell® 96 System, powered by **Selective Arrayed Levitation Technology (SALT™)**, fundamentally redefines the initial steps of 3D culture by **combining rapid spheroid formation with superior sample purification**. This directly addresses the key challenge of variability by ensuring that your complex models are built from the highest-quality cells from day one.

Forming Pure, Uniform Organoids *While* Purifying

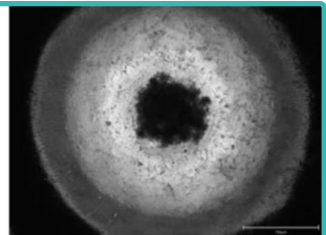
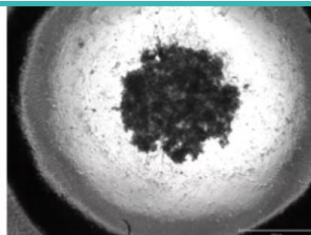
The LeviCell 96 uses magnetic levitation to create the optimal environment for spheroid formation and purification in a single, seamless process:

10X Culture Time Reduction

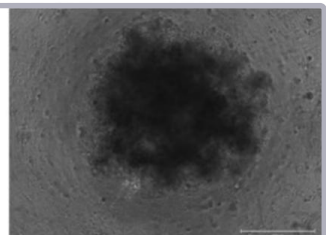
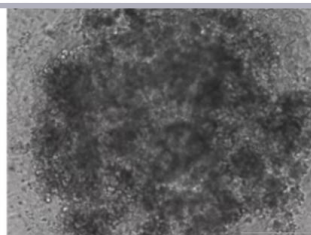
2 days
post sort/passage

7 days
post sort/passage

Levitation



No Levitation



Feature	LeviCell 96 Outcome	Key Benefit
Simultaneous Action	Levitation gently guides viable cells into spheroids while actively causing dead cells, debris, and unwanted aggregates to remain on the plate surface.	Highest Purity from the Start , eliminating heterogeneity caused by contaminating material.
Unprecedented Speed	Spheroid formation is achieved in just 2 hours compared to 1–5 days for traditional methods.	Accelerates the entire workflow, enabling a significant reduction in culture time (e.g., from 90 days to as little as 2 days overall).
Hands-Free Simplicity	Requires only 5 minutes of hands-on time for the entire process.	Frees up researcher time and minimizes the potential for human error and variability.

Metric-Driven Performance Advantages

By purifying the sample during formation, the technology delivers verifiable, quantifiable improvements:



Sample Purity

Achieve >90% debris removal, resulting in cleaner, more relevant models.



Consistency and Control

Allows for precise control over the shape, size, and density of spheroids/organoids, leading to more uniform and reproducible models.



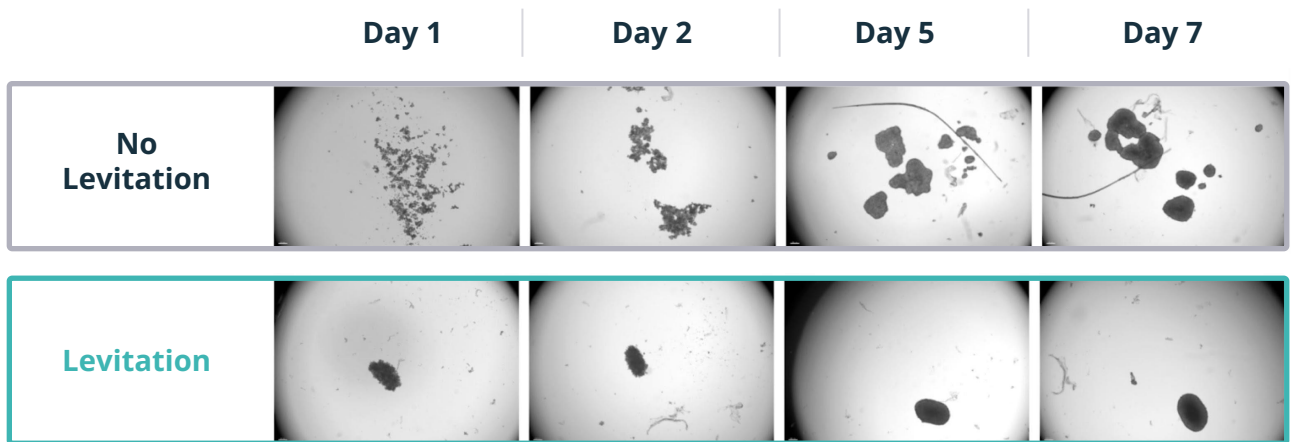
Cell Viability

Maintain >95% cell viability (even with low input samples) as dead cells are immediately excluded.



Media Exchange

Provides a gentle “Wash Protocol” for complete media exchange without losing spheroids.



Advanced Applications and Precision Engineering

The LeviCell 96 System extends beyond basic purification and rapid formation, enabling advanced applications in drug discovery and the creation of complex 3D models.

High-Value Application Capabilities

1

Cell and Organoid Enrichment

- **Viability Enrichment:** Enriches for viable input cells (e.g., post-transfection, thaw, or primary tissue dissociation).
- **Selection:** Can select live, drug-resistant organoids after drug treatment, collecting them for further analysis or evaluation of treatment and toxicity.

2

Spheroid Shape Engineering and Assembloids

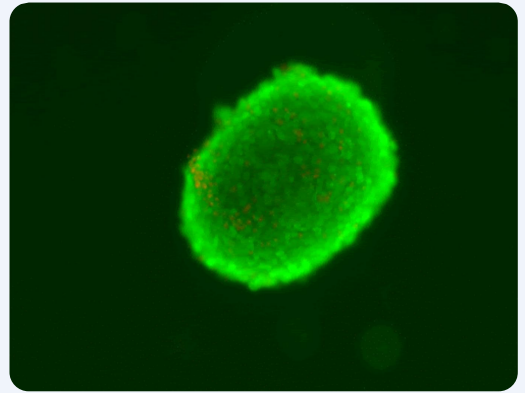
- **Rapid, Consistent Production:** Enables fast, automated production of spheroids with consistent shape, size, and density.
- **Customized Morphology:** The potential to influence morphology enables the creation of customized shapes, such as an elongated shape or multi-layer structures.
- **Complex Models:** Supports the creation of “Assembloids”—complex structures formed from multiple separate spheroid structures – or layers of different cell types.

3

Real-Time Drug Screening

- **Faster, More Efficient Studies:** Accelerates and improves in vitro drug studies.
- **Live Monitoring:** Allows researchers to visualize the entire sample and record cell-to-cell interactions or cell activity without any loss of information.
- **Time-course monitoring:** The ability to monitor cell behavior in real-time adds another layer of resolution and understanding of biology.

Highly purified spheroids were formed **in just 2 hrs.**



Summary of Benefits

The LeviCell 96 is your platform for:

Superior Sample Quality driven by simultaneous purification and organoid formation.

Rapid Time-to-Result through a 2-hour formation.

Unprecedented Control over 3D morphology.

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