



Meet

RASTRUM. ALLEGRO



Produce 3D cell models in minutes with RASTRUM™ Allegro, and access the reproducibility, efficiency, and scalability you need. Specifically engineered for researchers who demand precision and reliability. RASTRUM Allegro takes 3D cell model creation to new levels, enabling groundbreaking discoveries faster than ever before.

How can RASTRUM Allegro help you?

Explore biology in 3D



- Recreate dynamic tissue microenvironments
- Explore realistic cell behaviors in phenotypically relevant conditions
- Study complex biological systems and interactions

Advance disease understanding



- Recreate disease-specific microenvironments
- · Customize cell models for disease studies

Accelerate therapeutic discovery



- Test drugs in scalable and reproducible cell models
- · Conduct drug profiling and screening
- Accelerate drug discovery & development

Elevate your research with speed, reproducibility, and efficiency



Speed

6 mins/96-well plate 9 mins/384-well plate



Throughput

35+ plates/8 hour day



Precision

Post-print CVs <10%
Downstream assay CVs <19%

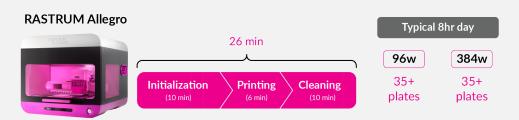


Efficiency

3.5x more cell models

Scalable 3D cell culture for every day research

With our drop-on-demand technology and innovative, precision robotics, RASTRUM Allegro allows you to create full plates of 3D models in just minutes enabling it to easily integrate into your daily cell culture routine.



Standardize your 3D cell model production

With RASTRUM Allegro, you can ensure consistent 3D cell model production with post print intra- and inter-plate CVs of <10% and downstream assay CVs of <19%. By minimizing variability, RASTRUM Allegro delivers the reproducibility you need to generate 3D models at scale to support screening campaigns—enabling you to drive meaningful insights and confident decision-making.

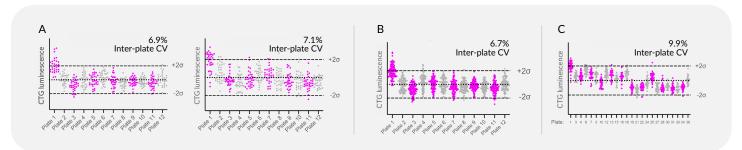


Figure 1. Consistency of RASTRUM Allegro in high throughput screening applications. (A) Consistent 3D model formation from Day 1 to Day 8 of screen. MCF-7 cells (5M cells/ml) were printed in Px02 matrices (Imaging Model) and treated with CellTiter-Glo® 3D. Luminescence was measured after 25 minutes of equilibration, and intra- and inter-plate coefficients of variation (CV) were calculated over different days. (B) Consistent 3D cell model formation across 12 plates. MCF-7 cells (5M cells/ml) were printed in Px02 matrices (Imaging Model), followed by CellTiter-Glo® 3D analysis across a 12-plate screen. (C) Consistent 3D cell model formation across 36 plates. MCF-7 cells (5M cells/ml) were printed in Px02 matrices (Imaging Model), followed by CellTiter-Glo® 3D analysis across a 36 plate screen. Inter-plate coefficient of variation values (CV) were calculated by expressing the standard deviation for each well as a percentage of the mean luminescence value for each well across plates.

Get more from every sample

With RASTRUM Allegro, you can create more 3D cell models from every sample—even your most precious patient biopsies. By minimizing dead volume and waste, it reduces the number of cells needed for each model. Produce 3.5x more models from just a few thousand cells. Make the most of your resources and advance your research efficiently.

Plate Format	Architecture	Total Cell Input				
		0.5M	1M	5M	10M	20M
96 well	Imaging Model	1.2	2.3	11.6	23.3	31.7
	Large Plug	0.5	1.1	5.4	10.9	21.7
	Double Matrix	0.8	1.5	7.6	15.2	23.3
	Triple Matrix	0.3	0.5	2.6	5.2	10.4
384 well	Screening Model	0.7	1.4	7.0	13.9	21.8

Figure 2. Illustrative number of plates per model that can be printed on RASTRUM Allegro for a given number of input cells.

Designed to advance your research

With RASTRUM Allegro, you have the power to produce complex disease environments and refine therapeutic strategies. Whether you're working with patient-derived cells or conducting high-throughput drug screens, RASTRUM Allegro's precision ensures that every experiment delivers valuable insights.

Your partner in discovery

At Inventia Life Science, we are committed to empowering you with the tools, training, and technical support needed to advance your research to new levels of discovery. Whether you're new to 3D biology or an expert, our team is dedicated to ensuring your success every step of the way.

RASTRUM: Transforming 3D biology. This time, it's different.