

SUNBIO SCIENCE

Standardizing Organoid Culture

Traditional organoid culture



Different organoid size

Multiple focal planes

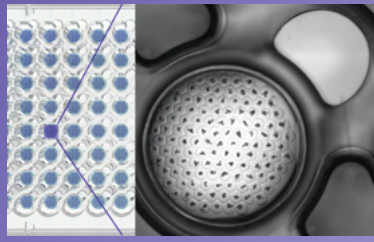
Organoids ECM-embedded

Random positioning in X, Y

Low throughput

Training required

Organoid culture on Gri3D®



Homogeneous organoid size

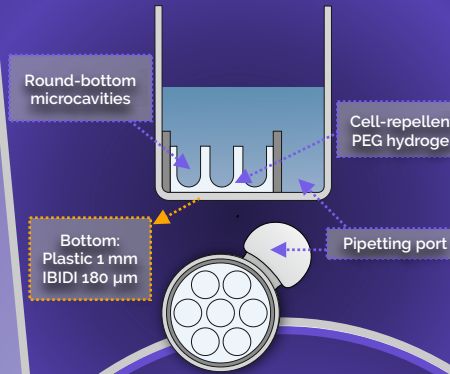
Single focal plane

Organoids in suspension

Pre-determined positioning

High throughput

Extremely user-friendly

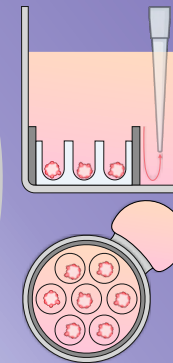
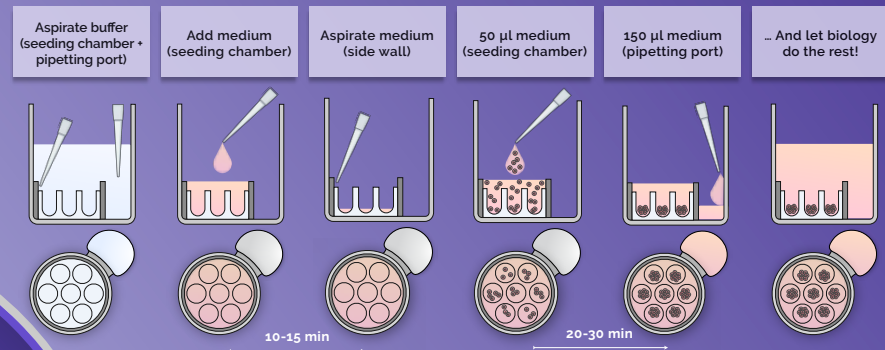


Gri3D®

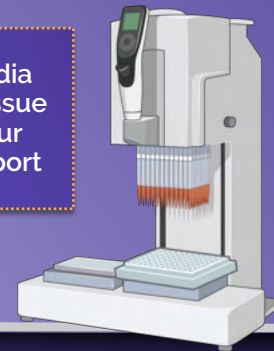


Elevate your organoid research

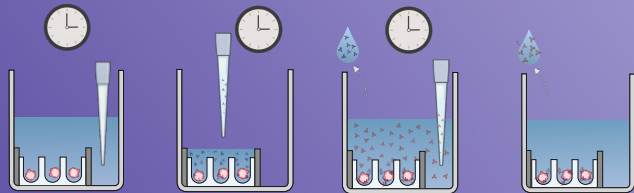
Ready-to-use and Automation-friendly



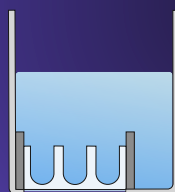
Perform your media change without tissue loss, thanks to our unique pipetting port



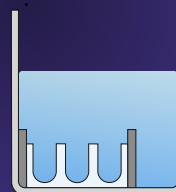
Empowering your Imaging



Choose the bottom of your choice

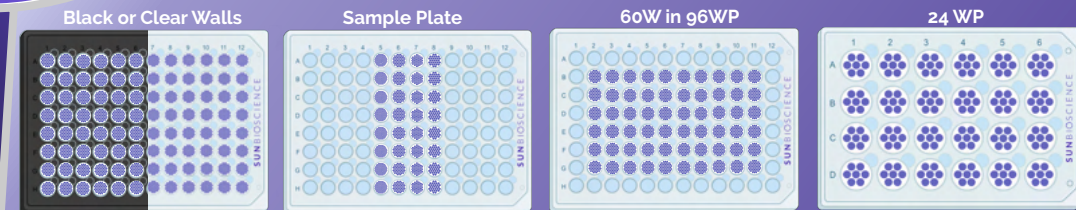


IBIDI (0.18 mm)



Plastic (1 mm)

Standard and Custom Gri3D® Products



	STANDARD SIZES									
µwell ø (µm)	100	200	300	400	500	600	800	1000	1600	
96WP #µwell/well	1677	511	211	121	73	55	31	19	7	
24WP #µwell/well	5681	1573	733	379	241	163	102	61	19	

Gri3D® : One Platform - Endless Possibilities

BLOOD-BRAIN BARRIER

Cells: human primary astrocytes, pericytes, and endothelial cells - 1:1:1 ratio

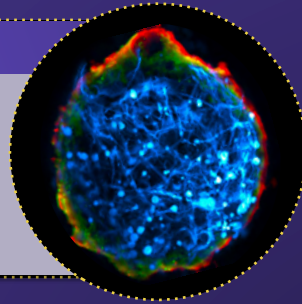
3000 cells per microwell



Time of culture: 3-5 days

Gri3D format: Gri3D® 96WP 600 µm

Simonneau et al., 2021



RETINA

Cells: mouse embryonic stem cells,

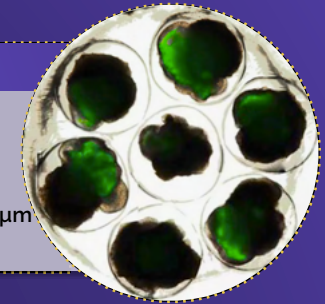
300 cells per microwell



Time of culture: 26 days

Gri3D format: Gri3D® 96WP 1600 µm

Decembrini et al., 2020



LIVER

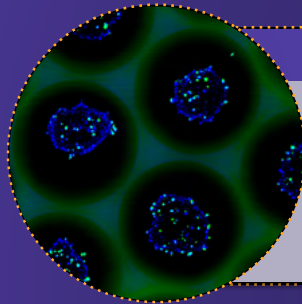
Cells: iPSC-derived hepatocytes, endothelial cells, and stellate cells - 10:3:1 ratio

4200 cells per microwell

Time of culture: up to 1 month

Gri3D format: Gri3D® 96WP 500 µm

Meseguer-Ripolles et al., 2021



INTESTINE

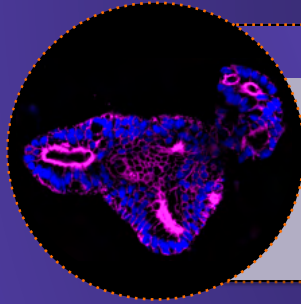
Cells: human adult stem cell-derived intestinal organoids

200 cells per microwell

Time of culture: 7 days

Gri3D format: Gri3D® 96WP 500 µm

Brandenberg et al., 2020



GASTRULOID

Cells: human pluripotent stem cells

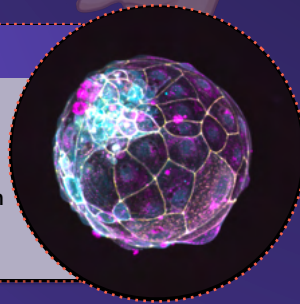
45 cells per microwell

Time of culture: 3-4 days



Gri3D format: Gri3D® 96WP 200 µm

Khoei et al., 2023



PANCREAS

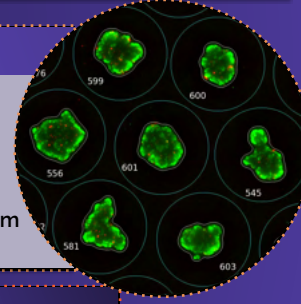
Cells: human pancreatic adenocarcinoma patient-derived organoids

200 cells per microwell

Time of culture: 1 week

Gri3D format: Gri3D® 96WP 500 µm

Roch et al., ISSCR 2022 - Poster



(IMMUNO)-ONCOLOGY

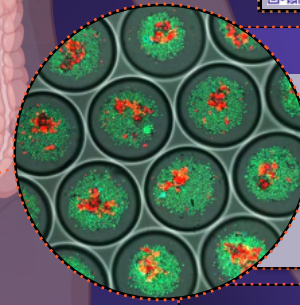
Cells: human colorectal cancer derived, and tumor-infiltrating lymphocytes at different ratios

200 cells per microwell

Time of culture: 1 week

Gri3D format: Gri3D® 96WP 500 µm

Dutta et al., 2021



BONE MARROW

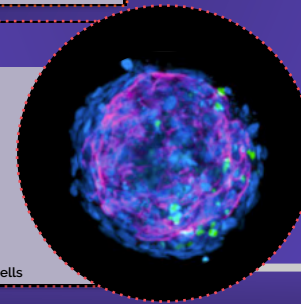
Cells: HUVECs* + mesenchymal stem cells - 75:25 ratio, addition of HSPC** at different ratios

500 cells per microwell

Time of culture: 1 week

Gri3D format: Gri3D® 96WP 400 µm

Giger et al., 2022



*Human umbilical vein endothelial cells / ** Hematopoietic stem and progenitor cells

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