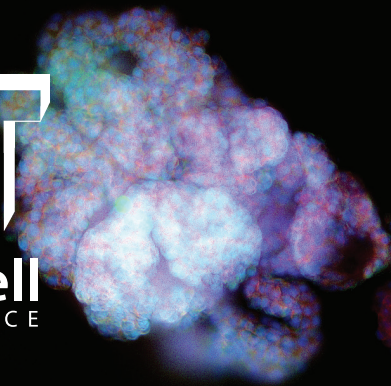


VitroGel[®] ORGANOID

Xeno-free hydrogel for organoid culture

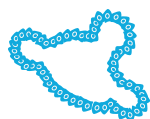
Thomas
Scientific

TheWell
BIOSCIENCE



Xeno-free

100% animal origin-free hydrogel system. Key for clinical applications.



Multiple organoid types

Supports a wide range of organoids from patient-derived samples, stem cells, tissues, co-culture and PDX sources.



Ready-to-use

Just add cells. No activation agent/adjustments required. 20 min protocol.



Reproducible

Batch-to-batch consistency for consistency results.



Easy cell harvesting

Recover cells in 20 min with our enzyme-free solution.



Automation Friendly

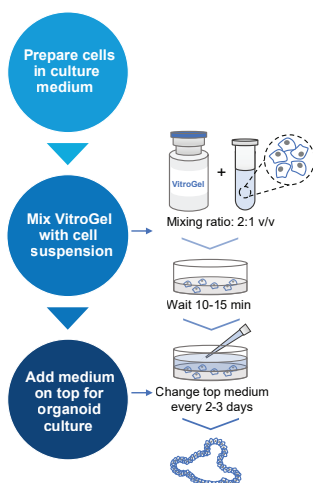
Room temperature stable for easy pipetting. Ideal for automation and high-content screening.



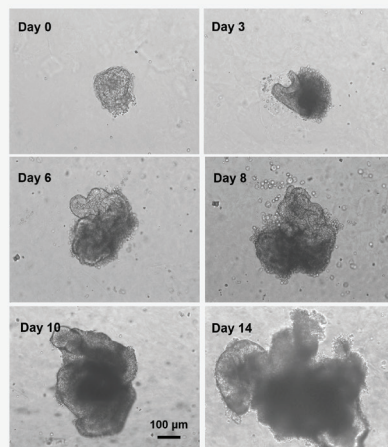
SIMPLE
VERSATILE
POWERFUL

VitroGel[®] ORGANOID are xeno-free (animal origin-free) hydrogels that support the growth of patient-derived organoids or organoids developed from pluripotent stem cells (PSCs), co-culture, and PDX model.

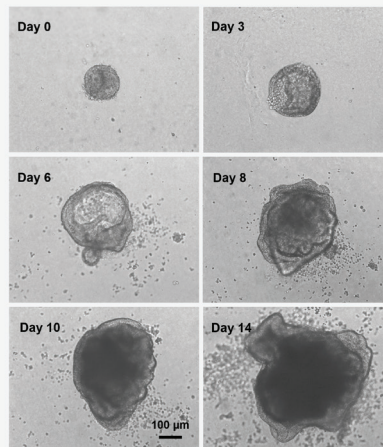
VitroGel ORGANOID hydrogels are ready to use at room temperature and have a neutral pH, transparent, permeable, and compatible with different imaging systems. The solution transforms into a hydrogel matrix by simply mixing with the cell culture medium. VitroGel ORGANOID hydrogels are good for both 3D cell culture and 2D hydrogel coating applications.



VitroGel ORGANOID

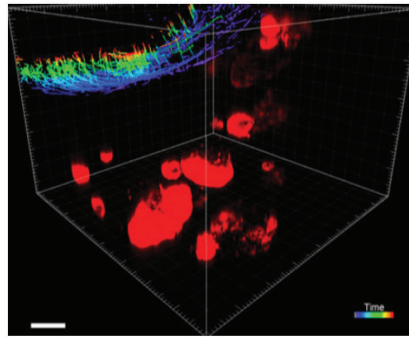
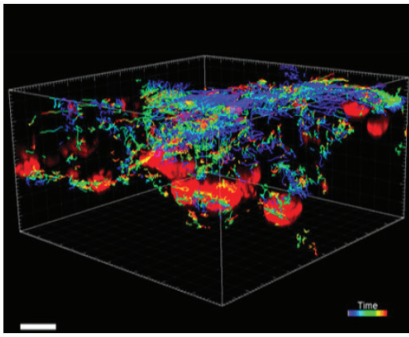


Matrigel



Mouse intestinal organoid culture on VitroGel ORGANOID and Matrigel

Small organoids recovered from liquid nitrogen were directly seeded with VitroGel and Matrigel, respectively. 2D Hydrogel Coating Method was used for VitroGel. Images show the growth of mouse intestinal organoid from day 0 to day 14.

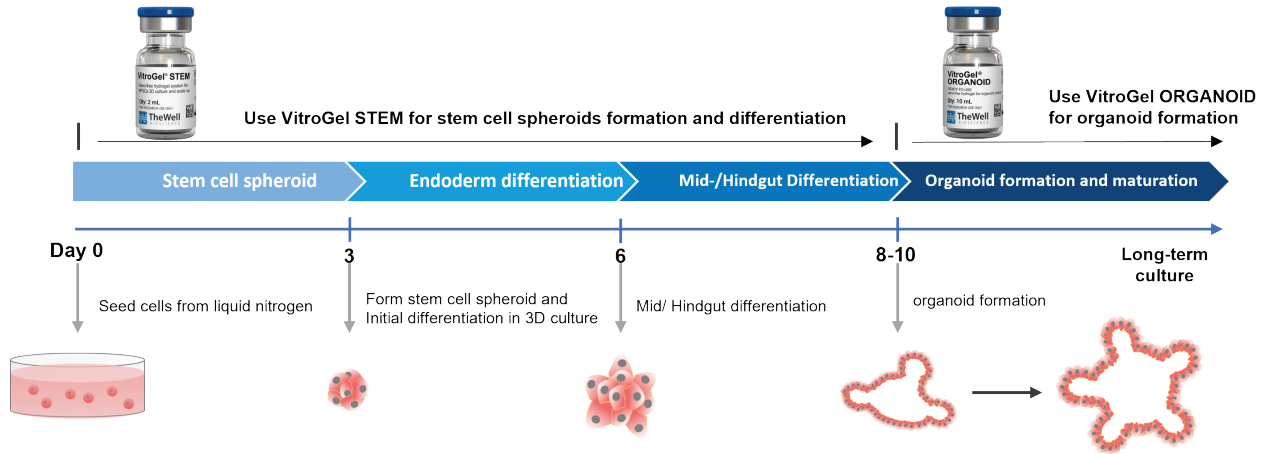


VitroGel ORGANOID improves immune cell-epithelial interactions in a co-culture model of Human Gastric Organoids (HGO) and Dendritic Cells

VitroGel ORGANOID improves immune cell-epithelial interactions in a co-culture model of Human Gastric Organoids (HGO) and Dendritic Cells. The image show a 20 h timelapse of mCherry-expressing human gastric organoids on the GOFloChip co-cultured with CellTracker Green-labeled Monocyte-derived dendritic cells for 20 h. Organoids are embedded in VitroGel ORGANOID-3 (left) and Matrigel(right). Poor movement of MoDCs (green) when co-cultured with and HGOs (red) embedded in Matrigel. Improved migration of MoDCs (green) towards HGOs (red) embedded in VitroGel ORGANOID-3).

(Image credit to Barkan Sidar, Michelle Cherne, Jim Wilking, and Diane Birnczok from Montana State University). Cherne et al. doi.org/10.3389/fphar.2021.707891

Overview of xeno-free 3D organoid workflow – Start from iPSC spheroids for stem cell differentiation and organoid formation



Complimentary Products



VitroGel® STEM

VitroGel® STEM is a xeno-free (animal origin-free) hydrogel system developed to improve the performance of three-dimensional (3D) static suspension cultures and scale-up of human pluripotent stem cells (hPSCs) to create a high-throughput system to model various tissue and disease states.



VitroGel® Organoid Recovery Solution

Recover intact organoids from either animal-based ECM or VitroGel hydrogel in 15 minutes while maintaining high cell viability. Enzyme-free formulation with a neutral pH.

Thomas No.	Mfr. No.	Product	Size
CHM11N989	VHM04-1	VitroGel® ORGANOID 1	10 mL
CHM11N990	VHM04-2	VitroGel® ORGANOID 2	10 mL
CHM11N991	VHM04-3	VitroGel® ORGANOID 3	10 mL
CHM11N992	VHM04-4	VitroGel® ORGANOID 4	10 mL

Thomas No.	Mfr. No.	Product	Size
CHM11N988	VHM04-K	VitroGel® ORGANOID Discovery Kit	4 x 2 mL
CHM11N984	VHM02	VitroGel® STEM	100 mL
CHM11P002	MS04-100	VitroGel® Organoid Recovery Solution	10 mL



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