

VitroGel® Glioblastoma (GBM) Xeno-Free EMT Kit



Ready-to-use kit for 3D GBM tumoroid formation



Xeno-free

Complete animal-free system for 3D GBM tumoroid generation with batch-to-batch consistency.



Enables EMT Process and Long-Term Culture

Supports the biologically relevant epithelial-to-mesenchymal transition and maintains the well-organized structure for months.



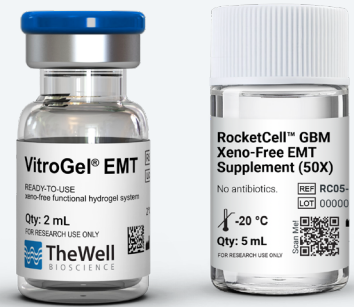
Simple Workflow at Room Temperature

Generate the tumoroid from a simple, single, spheroid with an easy operating protocol at room temperature.



Automation-Friendly and HTS

Compatible with lab-automated liquid-handling systems and supports high-throughput screening process.



The **VitroGel® Glioblastoma (GBM) Xeno-Free EMT Kit** is an excellent tool for generating 3D GBM tumoroids, enabling cells to undergo the epithelial-to-mesenchymal transition for examining pathways involved in cancer metastasis, drug screening, and high-throughput automation. This kit features the ready-to-use VitroGel® EMT hydrogel, RocketCell™ GBM Xeno-Free EMT Supplement (50X), and VitroPrime™ Ultra-Low Attachment, U-Bottom, 96-Well plate.

The VitroGel® Glioblastoma (GBM) Xeno-Free EMT Kit is designed to induce tumoroid formation from a simple single spheroid to generate a biologically relevant and well-organized tumoroid model for studying tumor progression, EMT dynamics, and therapeutic response in a preclinical setting.

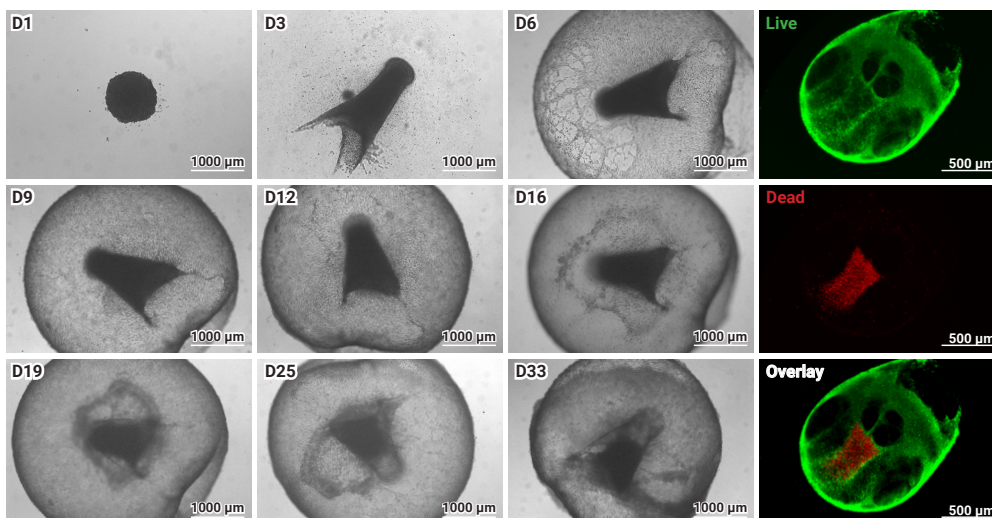


Figure 1: VitroGel® Glioblastoma Xeno-Free EMT kit supports tumoroid formation. U87 MG cells were resuspended in basal medium supplemented with 1X RocketCell™ GBM Xeno-Free EMT supplement and seeded into the VitroPrime™ Ultra-Low Attachment Plate, U-Bottom, 96-Well plates to promote overnight spheroid formation. The spheroids were supplemented with VitroGel® EMT and RocketCell™ GBM Xeno-Free EMT supplement to induce tumoroid generation. Light microscopy was performed multiple days to evaluate tumoroid growth over time (left). Cyto3D® Live-Dead Assay staining was performed on GBM tumoroids. Live cells within the tumoroid are shown as green and dead cells in red (right).

Learn more about
**VitroGel® Glioblastoma
(GBM) Xeno-Free EMT Kit**
thewellbio.com/VITROGEL-GBM



EASY WORKFLOW

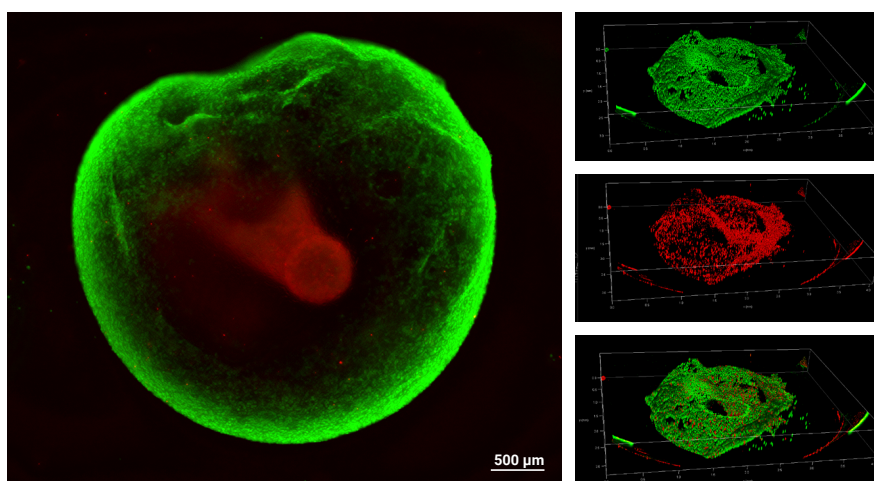
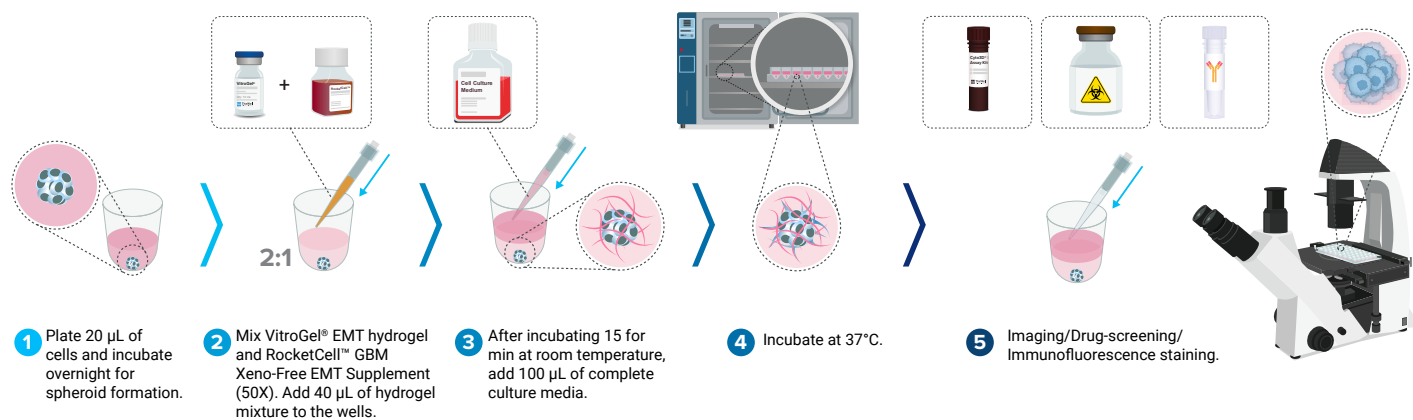


Figure 2: VitroGel® Glioblastoma Xeno-Free EMT Kit sustains tumoroid growth and viability. GBM tumoroids were subjected to cell viability staining using Cyto3D® Live-Dead Assay Kit after six weeks in culture. The presence of live cells within the tumoroid is shown in green, and dead cells are shown in red.

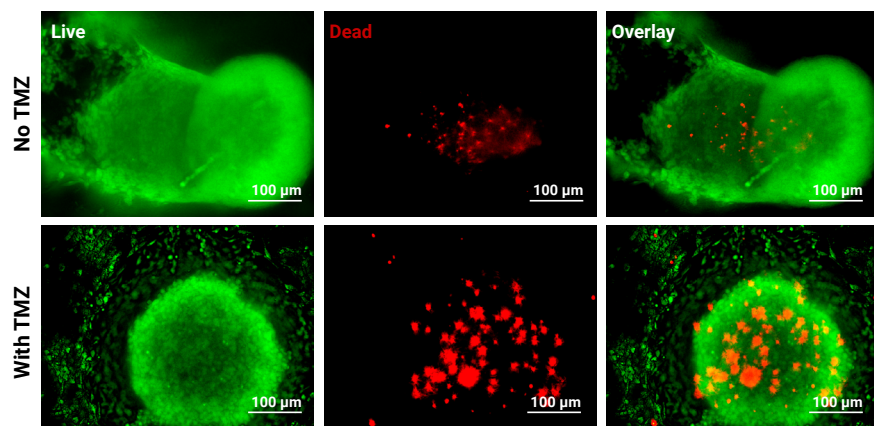


Figure 3: GBM tumoroids are susceptible to chemotherapy. Tumoroids were grown for 3 days in VitroGel® EMT hydrogel with RocketCell™ supplement system. The tumoroids were treated with Temozolomide (TMZ; 1mM) for 24 hours and subjected to cell viability studies. The Cyto3D® Live-Dead Assay Kit was used to label live cells (green) and dead cells (red) in the tumoroid, both with and without drug treatment. The pictures were obtained at a 20X magnification.

RELATED PRODUCT



Cyto3D® Live-Dead Assay Kit

Versatile, live/dead cell viability analysis for 3D and 2D cell culture.

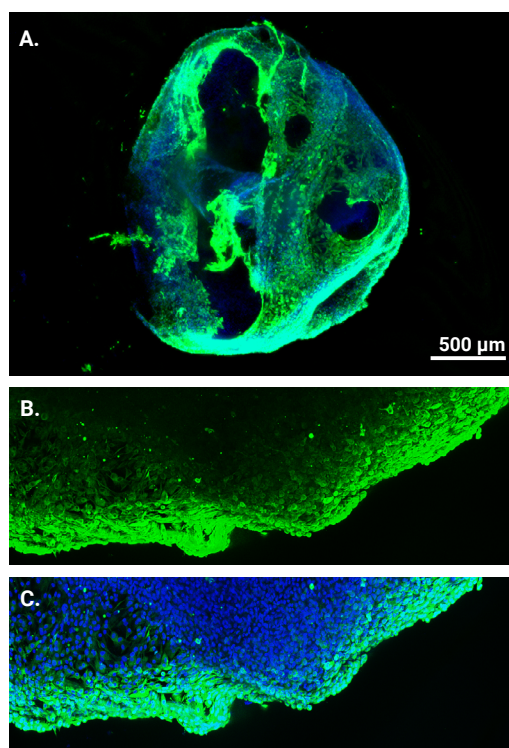


Figure 4: Assessing Vimentin expression, an EMT marker, in GBM tumoroids. Immunofluorescence staining was employed on three-week-old tumoroids to examine Vimentin expression. The nuclei were stained with DAPI (blue), and vimentin staining is shown as green. **A.** Representative image of tumoroid topology and size (4X magnification). **B-C.** Enlarged images of vimentin-positive regions obtained with confocal microscope at 10X magnification.

VitroGel® Glioblastoma (GBM) Xeno-Free EMT kit	VHM08-K	VHM08-HK
Kit Contents:	Quantity and Size	
• VitroGel® EMT hydrogel	1 x 2 mL	5 x 2 mL
• RocketCell™ GBM Xeno-Free EMT supplement (50X)	1 x 5 mL	5 x 5 mL
• VitroPrime™ Ultra-Low Attachment Plate, U-Bottom, 96-Well	1 x 96-well	5 x 96-well