

3DCelMatrix™

Cat # TM076 | Research Use Only (RUO)



Build Better Models. Every Time

A high-quality EHS-derived extracellular matrix for consistent 3D organoid and spheroid culture — lot-to-lot reproducibility guaranteed.

PRODUCT DESCRIPTION

3DCelMatrix™ is a high-quality extracellular matrix solution enriched in laminins, collagen IV, entactin/nidogen, and heparan sulfate proteoglycans to support robust organoid formation and scalable 3D culture workflows. The matrix is optimized for consistent spheroid and organoid culture across a wide range of stem cell and primary cell applications.

PRODUCT SNAPSHOT

Product Name	3DCelMatrix™
Catalog #	TM076
Volume	10 mL
Regulatory	Research Use Only (RUO)
Source	EHS tumor-derived
Formulation	LDEV-free; Defined ECM
Storage	-20°C
Lead Time	2–3 business days
Handling	Thaw slowly overnight at 2–8°C on ice before use

QC PARAMETERS

Appearance	Colorless liquid
Protein Concentration	>8 mg/mL
Gelation Time	<30 minutes
LDEV (PCR)	Negative
Endotoxin	<4.0 EU/mL
Sterility	Negative
Organoid Growth	Validated for organoid formation

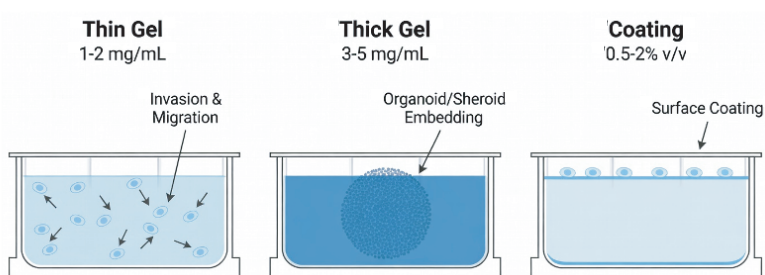
Note 1: Avoid repeated freeze-thaw cycles.

Note 2: Gelation begins above -10°C; rapid gelation at 22–37°C.

APPLICATIONS

- Organoid culture (intestinal, kidney, lung, brain)
- Tumor spheroid formation and cancer modeling
- Primary cell expansion in 3D environments
- Drug screening and disease modeling
- Cell invasion and migration assays

GEL CONFIGURATIONS



WORKFLOW

1. Thaw



Thaw overnight at 2–8°C on ice. Keep tips and tubes pre-chilled

2. Prepare



Dilute to target concentration using cold media or PBS.

3. Apply



Transfer to pre-chilled plates or vials quickly to prevent premature gelation.

4. Gelation



Incubate at 37°C for 15–30 min until gel forms. Gelation begins above -10°C.

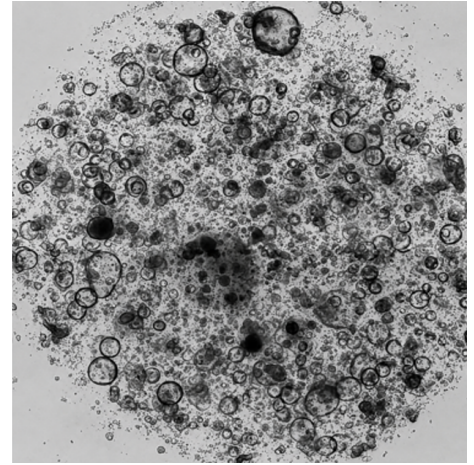
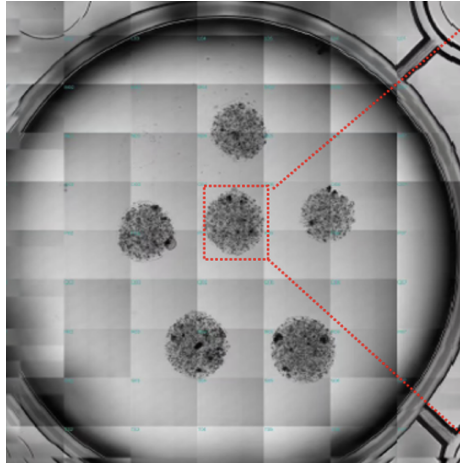
5. Seed & Culture



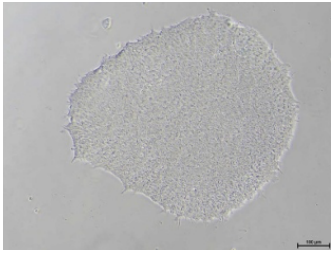
Seed cells on or within the gel. Maintain under standard culture conditions.

Validation Data

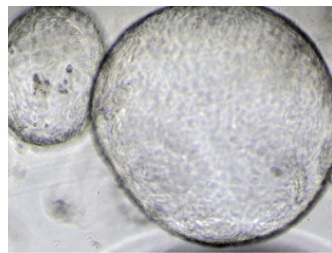
VALIDATION DATA — iPSC & ORGANOID MODELS



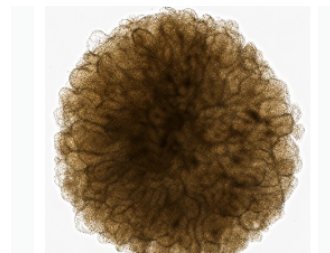
Uniform organoid formation in 3DCelMatrix™. Zoomed-in view of organoid morphology cultured in 3DCelMatrix™.



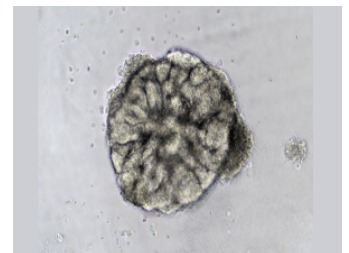
Representative human iPSC colony cultured in 3DCelMatrix™.



Complex lumen-like organoid morphology supported by 3DCelMatrix™.



Complex human midbrain organoid morphology supported by 3DCelMatrix™.



Human kidney organoid cultured in 3DCelMatrix™.

3DCelMatrix™ supports robust organoid formation and complex 3D morphology across multiple stem cell and organoid culture systems.

ORDERING INFORMATION — RELATED PRODUCTS

Product Name	Cat. No.	Format
SpheroWell™ 96-well plates	G7540	Plates
SpheroWell™ 6-well plates	G7541	Plates
SpheroWell™ 10-cm plates	G7542	Plates
SpheroWell™ T75 flasks	G7543	Flasks

