



denovoMATRIX
ENABLING BIOLOGY IN VITRO

screenMATRIX
BIOMATRICES FOR CELL CULTURE

Information sheet

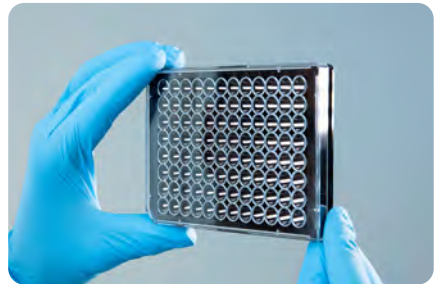
denovoMATRIX develops and manufactures biomimetic coatings that enable the culture of a wide variety of primary cells, stem cells and established cell lines. In vivo, extracellular matrix (ECM) molecules serve specific roles, which contribute to regulation of adhesion, differentiation, migration, phenotype, organization and structure. Our myMATRIX coatings recapitulate key functions of the natural ECM making cell culture easy, robust and biologically relevant.

CELL SEEDING PROTOCOL

1. Calculate the number of cells necessary for your screenMATRIX (96 wells x 0.34 cm²).
2. Harvest your cells from running cultures, wash and count.
 - Note: Thawing cells and directly seeding them onto the screenMATRIX is not recommended.
3. Unpack your screenMATRIX plates.
4. Seed your cells at the desired density into each well.
 - Use 100 μ L – 200 μ L of media in each well.
 - screenMATRIX plates do not require a preincubation with media.
 - We recommend seeding cells in 3 plates for 3 technical replicates.
5. Analyze your cells.
 - screenMATRIX plates are optimal for microscopic examinations (phase contrast as well as fluorescence), well suitable for colorimetric assays as well as standard DNA/RNA and protein isolation protocols and are compatible with automated systems.

IMPORTANT NOTES

- Always use aseptic techniques, work in a laminar flow hood and use sterilized equipment.
- Take care not to scratch the surface of screenMATRIX plates when pipetting – this can potentially result in cells being exposed to the tissue culture plastic.
- screenMATRIX plates are stable for 6 months at room temperature and up to 2 years at 4°C.



Keep in touch!
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www.captivatebio.com



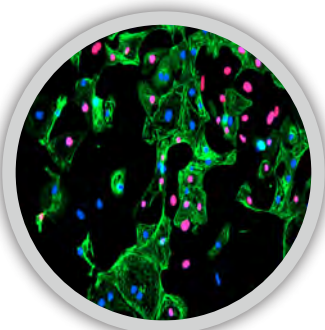
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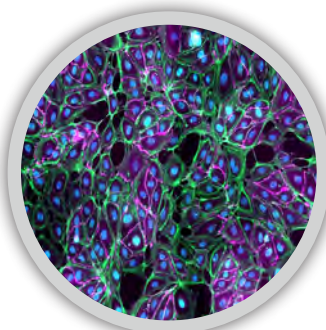
CAPTIVATE BIO™

The screenMATRIX is assembled using the glycosaminoglycan sugars (GAGs) dextran sulfate, heparin, chondroitin and dermatan. With the exception of the synthetic dextran sulfate, these molecules are naturally present in the extracellular matrix (ECM) and have important roles in signaling as well as growth factor binding. Peptides, which mimic various ECM proteins, complete the composition of the screenMATRIX. Some recapitulate important ECM adhesion proteins such as fibronectin, vitronectin, laminin and collagen, others mimic signaling proteins such as bone morphogenic protein, fibroblast growth factor and transforming growth factor (among others).

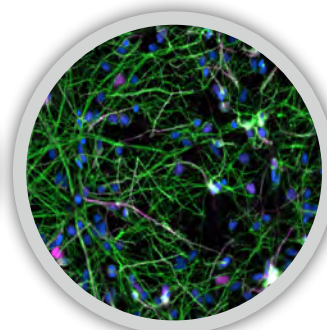
		1	2	3	4	5	6	7	8	9	10	11	12
Dextran	A	FGF peptide + RGD	Fibronectin peptide	RGD	laminin peptide 1	laminin peptide 2	laminin peptide 3	laminin peptide 4	laminin peptide 5	laminin peptide 6	laminin pep. 7 + RGD	Vitronectin peptide + RGD	Collagen 1 peptide
	B	Vitronectin peptide	Bone sialoprotein pep.	Osteocalcin peptide	Osteopontin peptide	BMP-2 peptide + RGD	E-Cadherin peptide	Tenascin peptide 1	Tenascin peptide 2	Perlecan peptide + RGD	TGF peptide	NCAM peptide	Collagen IV peptide
Heparin	C	FGF peptide + RGD	Fibronectin peptide	RGD	laminin peptide 1	laminin peptide 2	laminin peptide 3	laminin peptide 4	laminin peptide 5	laminin peptide 6	laminin pep. 7 + RGD	Vitronectin peptide + RGD	Collagen 1 peptide
	D	Vitronectin peptide	Bone sialoprotein pep.	Osteocalcin peptide	Osteopontin peptide	BMP-2 peptide + RGD	E-Cadherin peptide	Tenascin peptide 1	Tenascin peptide 2	Perlecan peptide + RGD	TGF peptide	NCAM peptide	Collagen IV peptide
Chondroitin	E	FGF peptide + RGD	Fibronectin peptide	RGD	laminin peptide 1	laminin peptide 2	laminin peptide 3	laminin peptide 4	laminin peptide 5	laminin peptide 6	laminin pep. 7 + RGD	Vitronectin peptide + RGD	Collagen 1 peptide
	F	Vitronectin peptide	Bone sialoprotein pep.	Osteocalcin peptide	Osteopontin peptide	BMP-2 peptide + RGD	E-Cadherin peptide	Tenascin peptide 1	Tenascin peptide 2	Perlecan peptide + RGD	TGF peptide	NCAM peptide	Collagen IV peptide
Dermatan	G	FGF peptide + RGD	Fibronectin peptide	RGD	laminin peptide 1	laminin peptide 2	laminin peptide 3	laminin peptide 4	laminin peptide 5	laminin peptide 6	laminin pep. 7 + RGD	Vitronectin peptide + RGD	Collagen 1 peptide
	H	Vitronectin peptide	Bone sialoprotein pep.	Osteocalcin peptide	Osteopontin peptide	BMP-2 peptide + RGD	E-Cadherin peptide	Tenascin peptide 1	Tenascin peptide 2	Perlecan peptide + RGD	TGF peptide	NCAM peptide	Collagen IV peptide



Cardiomyocytes



HUVECs - MSCs



Neurons

Did you know that we already developed specific matrices for human mesenchymal stem cells (MSCs) and induced pluripotent stem cells (iPSCs)? Check out our [myMATRIX MSC](#) and our [myMATRIX iPSC](#) product lines.

