

## Synthetic Substrates for Enhanced Cell Culture

#### Description

Stem Pharm's synthetic substrate technology is based on functionalized multi-armed polyethylene glycol monomers that are cross-linked and incorporate bioactive peptides to create optimized adhesion and biomechanical properties for cell culture applications. These optically clear substrates lack the confounding complexities of animal-derived substrates, and generate appropriate cellular environments that improve outcomes for cell expansion, differentiation, and *in vitro* cell-based assays.

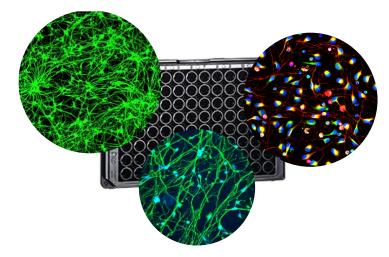
#### Available in Two Formats

#### Ready-To-Dispense Synthetic Hydrogels



- Chemically defined hydrogel
- Non-toxic to cells
- Compatible with automation workflows; not temperature sensitive
- Applications include:
  - Reproducible generation of organoids
  - Encapsulation of tumor organoids and spheroids
  - Development of high quality in vitro cell-based assays

SureCoat<sup>™</sup> Pre-Coated Cell Culture Plates

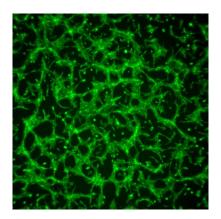


- Culture plates pre-coated with Stem Pharm's SureCoat synthetic substrate
- Optimized for superior cell adhesion
- Ready-to-use out of the package
- Shelf stable at room temperature
- Accelerates cell maturation, enhances cellular phenotypes and improves assay performance
- Designed for iPSC-derived neural cells, and other cell types including iPSCs, MSCs and endothelial cells

## **Ready-To-Dispense Synthetic Hydrogel Products**

## SP-105

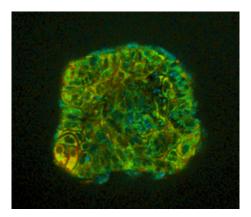
- Designed for *in vitro* cellular assays
- Formulation optimized for cell adhesion
- Supplied frozen
- Application high quality vascular tubulogenesis assays with HUVEC and iPSC-derived endothelial cells



HUVEC cells cultured on SP-105

## SP-111

- Designed for encapsulation and expansion of spheroids and organoids
- Supplied concentrated at 2X and can be diluted to create an optimized supportive biomechanical environment
- Optically clear



Colon carcinoma organoid encapsulated in SP-111

# We also develop custom synthetic hydrogels optimized for your cell application

### **Ordering Information**

Product Name	Catalog #	Price
SP-105 Hydrogel, 1 mL vial	SP-105	Contact us for pricing
SP-111 Hydrogel, 2X concentrated, 0.5 mL vial	SP-111	
Custom formulation development	Contact us for pricing	

## Contact us to place an order or request more information.

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