



Publish Date: Spring 2009

# 3D Biotek

*Add Extra Dimension to Your Innovation*

## Products & Price

### *Spring 2009 Promotions*

We are **The World Leader in 3D Cell Culture**

We **Make The Finest 3D Cell Culture *Affordable !!***

We support **the Broadest Applications**

#### **Applications:**

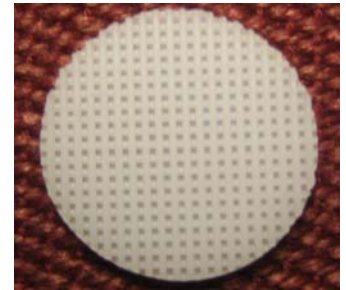
- In-vitro Tumor Models
- Drug Discovery
- Stem Cell Research
- Tissue Engineering
- .....
- ◆ All Other Cell Biology Applications

**Upgrade To 3D Cell Culture & Lower Your Cost!!**



### 3D Insert™-PCL

Polycaprolactone (PCL) is a biodegradable polyester material that has been used in many FDA approved implants, drug delivery devices, suture, adhesion barrier and now is available in 3D Biotek's revolutionary 3D Insert™! PCL has also been widely used in fabrication of porous 3D scaffolds for tissue engineering research.



### 3D Insert™-PS

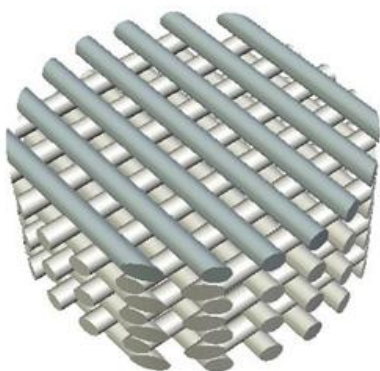
This is the ideal product for your low cost, quality 3D cell culture applications.

3D Insert™-PS is made from polystyrene, the same material as that of tissue culture plates. The combination of transparency of the material and the porous structure design of 3D Insert™-PS allows researchers to monitor the cell growth under an inverted light microscope without the need of using sophisticated equipment.

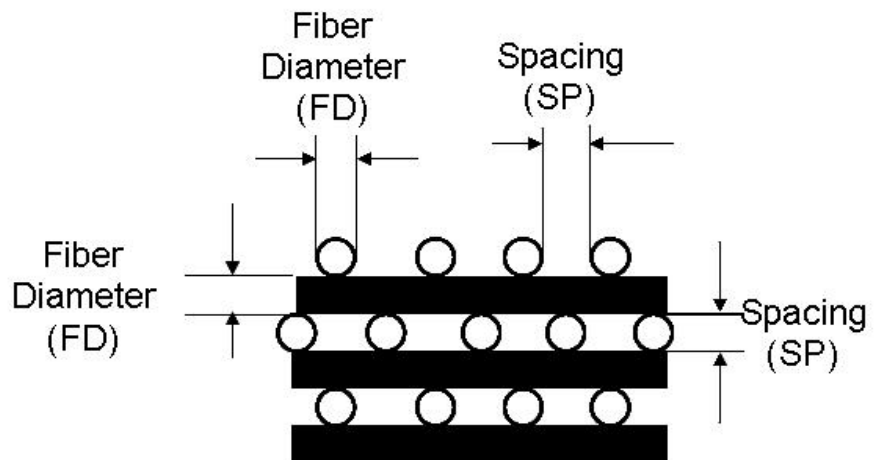


***The same tissue culture polystyrene (TCP), now available in 3D !!***

### Structural Parameters of 3D Insert™



3D Insert™ Structure



3D Insert™ Structure Parameters

**Just some of the benefits of 3D Insert™**

**1. 100% open porosity**

The pores of the products are 100% open and interconnected, making it easy for cells to be seeded throughout the porous scaffolds and the nutrient and cell metabolism waste to be exchanged.

**2. Well defined pore size and porous structure**

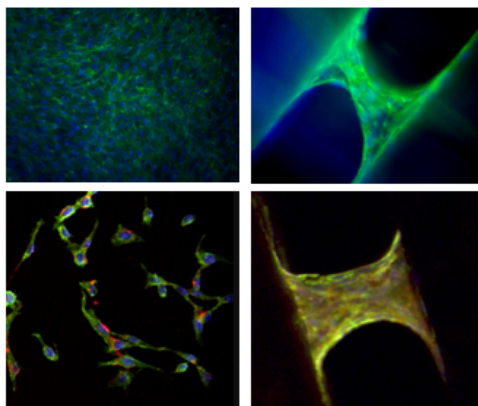
3D Biotek's precision micro-fabrication technology produces well-defined porous structure and ensures the reproducibility of the porous structure from batch to batch.

**3. Organic solvent free**

Cytotoxic organic solvents, such as chloroform and methylene chloride, are often used in fabricating PCL scaffold. 3D Biotek's precision micro-fabrication technology is a solvent free manufacturing process. Therefore, the PCL 3D Insert™ is free of organic solvent.

**Easy Imaging**

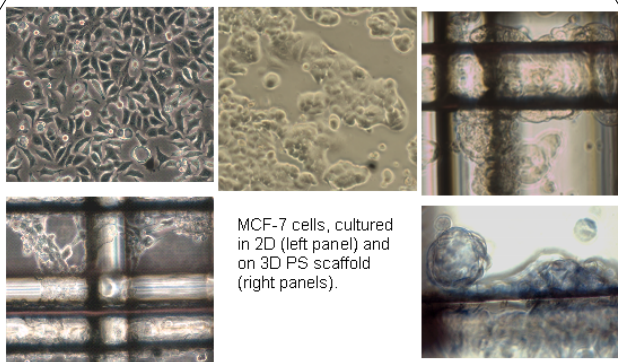
Cells cultured on 3D Insert™-PS have enhanced cellular organization



Fluorescent (top panels) and Confocal (bottom panels) images of NIH-3T3 cells cultured in 2D (left panels) and on 3D PS scaffolds (right panels). F-actin filaments (green), Fibronectin (red), DAPI (blue).

**Tumor Cells**

Cells can form 3D structures within 3D Insert™-PS, while 2D cells grow in a monolayer.

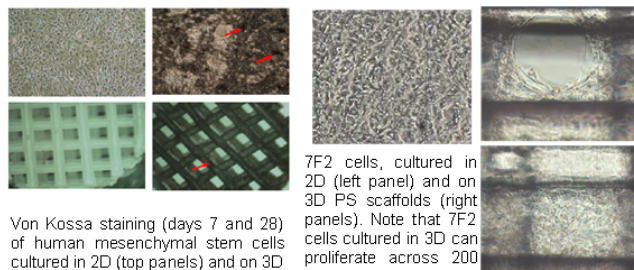


MCF-7 cells, cultured in 2D (left panel) and on 3D PS scaffold (right panels).

ECC1 cells, cultured in 2D (top panel) & on 3D PS scaffold (bottom panel).

**Tissue Engineering and Stem Cells**

3D Insert™-PCL and 3D Insert™-PS support stem cell proliferation and differentiation



Von Kossa staining (days 7 and 28) of human mesenchymal stem cells cultured in 2D (top panels) and on 3D PCL scaffolds (bottom panels). Red arrows show positive staining for mineralized nodule formation.










7F2 cells, cultured in 2D (left panel) and on 3D PS scaffolds (right panels). Note that 7F2 cells cultured in 3D can proliferate across 200 µm pores.

**3D Biotek provides the BEST 3D cell culture products in the industry**

	Brand Name	Ready to use	100% interconnected pores	High surface to volume ratio	Variable configurations (customizable)	Easy cell recovery	Plate reader compatible	Transparency (direct observation with light microscope)
3D Biotek	3D Insert-PS	★	★	★	★	★	★	★
	3D Insert-PCL	★	★	★	★	★	☆	☆
All Other Companies	Gel Matrix	☆	☆	☆	☆	☆	☆	★
	PLA foam	☆ / ★	☆	★	☆	☆	☆	☆
	CaP foam	★	☆	★	☆	☆	☆	☆
	Alginate Foam	★	☆	★	☆	☆	☆	☆

**3D Biotek's scaffolds have the broadest applications**

**Commonly used assays that are compatible with 3D Biotek's cell culture scaffolds**

<b>Cell lifting and tissue digestion</b> (Trypsin, Trypsin-EDTA, Collagenase)	
<b>RNA isolation</b> (Tri-Reagent)	
<b>DNA assay</b>	
<b>Protein assays</b>	
<b>Proliferation assays</b> (MTT, Alamar blue)	
<b>Cell transfections</b> (transient, stable, viral)	
<b>Characterization stains</b> (Von Kossa, Oil-Red O)	
<b>IF and IHC</b>	
<b>Toxicity assays</b> (LDH)	

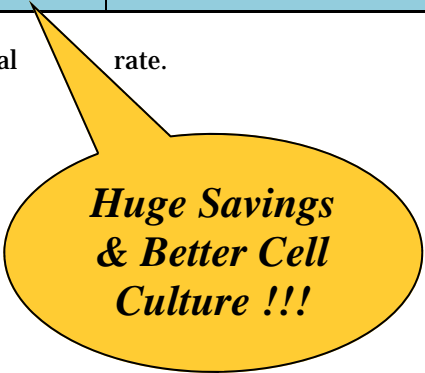
You can actually **lower your overall cell culture cost** by upgrading to 3D.

— products only from 3D Biotek

		2D Cell Culture	3D Cell Culture	Benefits	% of Saving
<b>Total Cells / Well</b>		12,000	90,000	<b>3D Insert™</b> scaffolds provide 3D culture space. On average, they can grow <b>650% MORE cells</b> than regular 12-well, 2D cell culture plates.	
<b>Plate cost per week</b>		\$16.77	\$64.00 *	<b>(\$67.91)</b>	
<b>Weekly Cell Culture Expense (media, consumables, &amp; labor cost)</b>	<b>Fibroblast Culture</b>	\$62.80	\$12.70	<b>Save \$50.10</b>	<b>Save 80%</b>
	<b>Stem Cell Culture</b>	\$406.00	\$65.50	<b>Save \$340.50</b>	<b>save 84%</b>

<b>Total Weekly Cell Culture Cost</b>	<b>Fibroblast Culture</b>	\$79.57	\$76.70	<b>Save \$2.87</b>	<b>Save 4%</b>
	<b>Stem Cell Culture</b>	\$ 422.77	\$ 129.50	<b>Save \$ 293.27</b>	<b>Save 69%</b>

\* Plate cost reflects two 3D Insert™ PS152012-6 sterile plates at summer promotional rate.



**Grow More Cells On 3D Insert™,  
Lower Overall Cell Culture Cost!!**

## 3D Insert™-PS Series

12 & 96 well sterile 3D cell culture plates with **non-degradable** polymer (Polystyrene) . This is the ideal product for your daily low-cost fine-quality 3D cell culture applications.

No one beats our price!



### PS152012-6

- 12-well sterile plate with **6** 3D scaffolds
- Fiber Diameter: ~150 microns
- Spacing: ~200 microns

**List price:** \$64 / plate

**Seasonal Promotion:** **Buy 3 Get 3 Free**

**Your Final Cost:** only **\$32**/ plate

**=50% off**



### PS304012-6

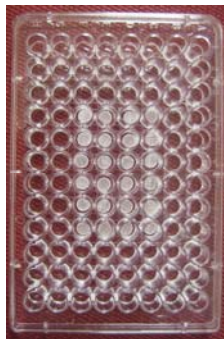
- 12-well sterile plate with **6** 3D scaffolds
- Fiber Diameter: ~300 microns
- Spacing: ~400 microns

**List price:** \$64 / plate

**Seasonal Promotion:** **Buy 3 Get 3 Free**

**Your Final Cost:** only **\$32**/ plate

**=50% off**



### PS152096-24

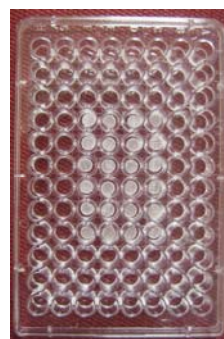
- 96-well sterile plate with **24** 3D scaffolds
- Fiber Diameter: ~150 microns
- Spacing: ~200 microns

**List price:** \$72 / plate

**Seasonal Promotion:** **Buy 2 Get 2 Free**

**Your Final Cost:** only **\$36** / plate

**=50% off**



### PS304096-24

- 96-well sterile plate with **24** 3D scaffolds
- Fiber Diameter: ~300 microns
- Spacing: ~400 microns

**List price:** \$72 / plate

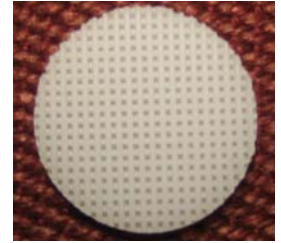
**Seasonal Promotion:** **Buy 2 Get 2 Free**

**Your Final Cost:** only **\$36**/ plate

**=50% off**

### 3D Insert™-PCL Series

12 & 96 well sterile 3D cell culture plates with **Biodegradable** polymer (Polycaprolactone). It is ideal product for stem cell tissue engineering studies. Comparing with competitors' inferior products and ~\$300 price, **you save 55% on better products.**



#### PCL303012-6

- 12-well sterile plate with **6** 3D scaffolds
- Scaffold diameter: ~21 mm
- Height: 1.5mm
- Fiber Diameter: ~300 microns

**List price:** \$199/ plate

**Seasonal Promotion:** **32% off (must buy 2 or more)**

**Your Final Cost:** only **\$135/** plate



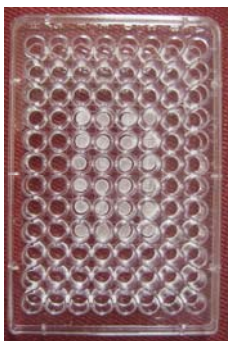
#### PCL305012-6

- 12-well sterile plate with **6** 3D scaffolds
- Scaffold diameter: ~21 mm
- Fiber Diameter: ~300 microns
- Spacing: ~500 microns

**List price:** \$199/ plate

**Seasonal Promotion:** **32% off (must buy 2 or more)**

**Your Final Cost:** only **\$135/** plate



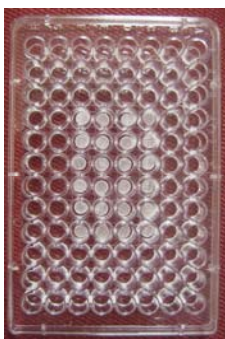
#### PCL303096-24

- 12-well sterile plate with **24** 3D scaffolds
- Fiber Diameter: ~300 microns

**List price:** \$199/ plate

**Seasonal Promotion:** **32% off (must buy 2 or more)**

**Your Final Cost:** only **\$135/** plate



#### PS305096-24

- 12-well sterile plate with **24** 3D scaffolds
- Fiber Diameter: ~300 microns
- Spacing: ~500 microns

**List price:** \$199/ plate

**Seasonal Promotion:** **32% off (must buy 2 or more)**

**Your Cost:** only **\$135/** plate



## Best Customer Service

Only 3D Biotek offers a full range of customer service and covers the broadest applications in the 3D Cell Culture Industry.

**Along with your purchase of the finest 3D cell culture products, we offer the following services to assist your research.**

- ◆ **Customized Designs and Manufacturing of Specialty 3D Scaffolds**
- ◆ **Support Broad 3D Cell Culture With Various Cell Lines**
- ◆ **Drug Screening Studies Using Normal Primary Cells**

*Hepatocytes*

*Myocytes*

*Osteoclasts*

*Osteoblasts*

*Periosteal Cells*

- ◆ **Drug Screening Studies Using Primary Cancer Cells , Such As**

*Lung Cancer*

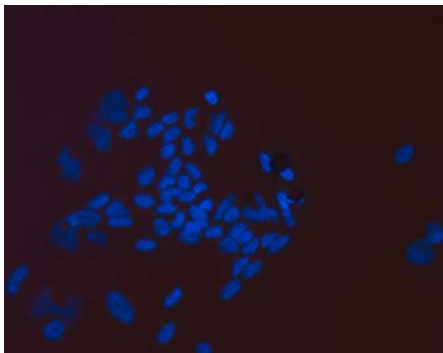
*Liver Cancer*

*Colon Cancer*

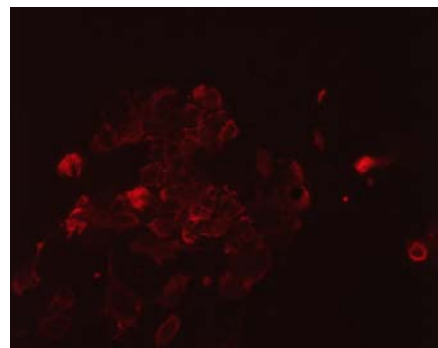
*Breast Cancer*

*Gliomatosis Cerebri (Infiltrative Diffuse Astrocytosis)*

- ◆ **Customer Training for 3D Cell Culture**
- ◆ **and much more .....**



Human Primary Endometrium



Human Primary Endometrium Glandular Epithelial Cells

# **Biotek**

*The World Leader in 3D Cell Culture*

We also provide cell culture consumables, at *unbeatable prices*, that are compatible with our 3D Insert™ products.



**For more products and purchasing, please visit our website**

**[www.3DBiotek.com](http://www.3DBiotek.com)**

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