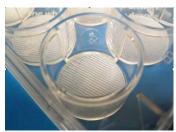


# Features and Benefits of 3D Insert<sup>TM</sup>-PS



Ideal for daily 3D cell culture applications. By simply placing 3D Insert<sup>TM</sup> –PS into the wells of cell culture plates, you can turn an ordinary 2D monolayer cell culture into a novel 3 dimensional cell culture environment, which offers many extraordinary benefits you may never have realized.

## **Pre-sterilized and Ready to Use**

3D Insert<sup>TM</sup>-PS scaffolds are prepackaged into wells of tissue culture plates and terminally sterilized using  $\gamma$ -radiation. They are ready to use!

## **Easy Monitoring Cell Growth**

3D Insert<sup>TM</sup>-PS scaffolds are made from polystyrene. The combination of transparency of the material and the porous structure design makes it possible to monitoring cell growth under an inverted light microscope.

### **Mechanically Strong and Easy to Handle**

3D Insert<sup>TM</sup>-PS scaffolds are mechanically strong. Therefore, they are easy to handle and manipulate when needed.

#### **Free of Animal Derived Material**

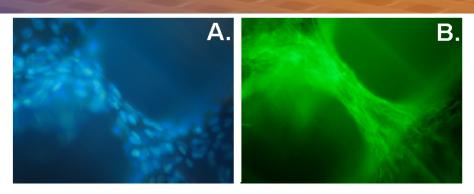
Scaffolds are made from 100% synthetic polymer with consistent quality to ensure experimental reproducibility when using different batches of 3D Insert<sup>TM</sup>-PS.

## **Improved Cell Culture Efficiency**

3D Biotek's products have increased surface areas as compared to 2D cell culture plates. As a result, more cells can be cultured using the same size cell culture dish/plates/flasks/bioreactors.

### Easy Separation of Cytokines and Growth Factors Secreted by Cultured Cells

Our 3D cell culture scaffolds will not absorb cytokines and growth factors. Therefore, cytokines and growth factors secreted by the cultured cells can easily be separated or recovered from culture medium without extensive separation steps.



Fluorescent images showing that fibroblasts cultured using 3D Insert  $^{TM}$  – PS form 3D cell/ECM tissue-like structures within the scaffold. Cell nuclei and F-actin microfilaments were stained with (A) DAPI (blue) and (B) AlexaFluor 488 phalloidin (green), respectively (40X).