

3D Biotek's 3D Insert™ -PCL and -PS Series: Frequently Asked Questions

1. How do I seed cells onto 3D Insert™ scaffolds?

Our cell seeding protocol has been optimized for maximum seeding efficiency (80-85% attachment). Please visit our website (www.3DBiotek.com) to download the proper seeding protocol that has been customized for your scaffold's size.

2. What concentration should I use to seed cells onto 3D Insert™ scaffolds?

The number of cells to seed onto your scaffold depends on cell type. Initially, we recommend seeding the same number of cells/cm² onto the scaffolds as you would normally on 2D TCP.

3. What if I see a lot of cells attached to the bottom of the well and not to the scaffold?

If you followed 3D Biotek's seeding protocol, there will be cells attached to your scaffold. Since there is always a chance that cells attached to the bottom of the well, we recommend moving your scaffolds into fresh, untreated wells, 24 h after seeding. If you are using 3D Insert™-PS, be sure to look at your cells on all four scaffold layers by changing the focus plane on your microscope.

4. How do I detach cells from 3D Insert™ scaffolds?

Detaching cells from our scaffolds is simple. Any 2D detachment method that you're currently using can be applied to lift the cells cultured on our 3D Insert™-PS scaffolds! If you're still unsure, we recommend trying the following for 10-30 min:

- Trypsin solution
- Collagenase solution
- Mixture of trypsin and collagenase solutions

Since we have found that cells cultured on 3D Biotek's PCL and PS scaffolds secrete significant extracellular matrix (ECM), it may be necessary to alter the methods (concentration, incubation time) that we have listed to suit your cell culture needs and optimize your cell yield.

5. Do 3D Insert™ scaffolds have any coating?

Our 3D Insert™ scaffolds do not contain any supplemental coatings or growth factors and do not require any additional work; you purchase our scaffolds as tissue culture treated and ready for immediate use. **Please note that the tissue culture plates included with your scaffolds are not tissue culture treated.** This is to promote cell attachment to the scaffolds and not to the bottom of the wells. If you would like to use tissue culture treated plates from 3D Biotek in parallel with your 3D studies, please visit our website (www.3dbiotekstore.com/) to place your order.

6. What assays can be used with 3D Insert™ scaffolds?

The major advantage of choosing 3D Insert™ scaffolds over any other 3D environments is that our scaffolds are compatible with any 2D assays that you currently perform. It is not necessary to take the time to change your protocols to receive the benefits of 3D cell culture! Still not convinced? Visit our website to see a list of 2D assays that have been performed and are compatible with our 3D scaffolds (www.3DBiotek.com).

7. Which fiber and pore size should I use?

If you are initially unsure of which fiber and pore size to choose for your research applications, please contact 3D Biotek to speak directly to our research team. Our scientists will guide you through the process of choosing the right fiber and pore combination for your needs. Technical support: 732-729-6270 (ext. 4108).

8. What if I don't see the fiber and pore size that I need listed on 3D Biotek's website?

Don't worry, 3D Biotek will be happy to customize your order, according to fiber and pore size, to suit your research needs!