

Ultra-Low Attachment (ULA) Coating for Tissue Culture Plates

Adaptable surface coating to deter cells from attaching.

Benefits

- Does not require extensive wet-lab processing
- Scalable
- Adaptable to any surface-type and shape
- Low production cost

Background

Cell based studies are moving from two-dimensional (2D) culture to three-dimensional cell culture, due to the advantage of providing more psychologically relevant data, as all cells in our body actually grow in three dimensions. In addition 3D cell culture systems have gained increasing interest in drug discovery and tissue engineering.

In addition cells grown in suspension or as spheroids are the mammalian host for large-scale commercial production of therapeutic proteins, such as monoclonal antibodies.

The predicted compound annual growth rate of the 3-D cell culture market is more than 11%, which means the size of the market will double in less than 8 years, reaching USD 1.99 Billion by 2026.

Technology

To enable cells to grow as 3D cultures, a number of technologies have been developed, which differ widely in regards to the input of labour required and the output of cells produced.

Our solution is a low-cost, highly reproducible coating that can be applied to many surfaces, including plastics and glass. This technology can be optimised for a wide range of use cases.

It does not use any wet-lab processes and is readily scalable for large scale manufacturing.

IP Status

Combination of patentable IP and trade secrets.

Potential Markets

Laboratory Consumables; Life Sciences Reagents and Consumables; Plasticware, Glassware; Commercial production of therapeutic proteins

Partnering Opportunities

The technology is available for codevelopment and licensing. Specific coatings can also be developed on a contractual basis.

Contact Us

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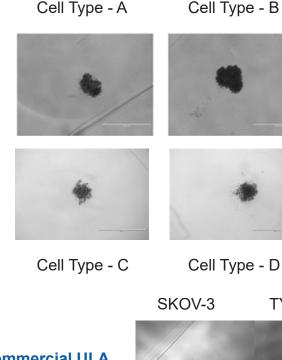


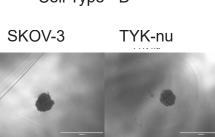
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Figure 1. UniSA ULA technology can be used for ultra-low attachment 3D cell culture of multiple cell types

Commercial ULA Plates

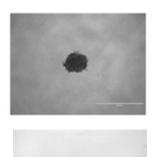


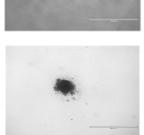


UniSA ULA Plates

Cell Type - A

Cell Type - B





Cell Type - C

Cell Type - D

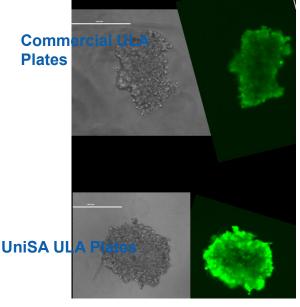


Figure 3. UniSA ULA plates produces excellent results for live cell imaging.

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Commercial ULA Plates

Small batch Uni-SA ULA plates (4 plates)

Upscale UniSA ULA plates (24 plates)

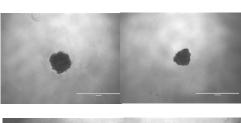


Figure 2. UniSA ULA plates can be manufactured in larger scale without any drop off in performance.