

How to Pick the Right Cell Culture Surface

A Guide to Cell Growth Surfaces

With so many different cell growth surfaces to choose from, how do you pick the right one for your project? For *in vitro* cell culture success, it's important to support cell growth and differentiation with physiologically relevant conditions.

Three Types of Surface Treatments that Enhance Cell Attachment:

1



BIOLOGICAL

ECM proteins such as collagen or laminin, found in Corning Matrigel® matrix, recreate *in vivo* conditions for 2D and 3D cultures.

MIMETIC

Synthetic active, animal-free peptides such as Corning® PureCoat™ ECM mimetic and Corning Synthemax® substrate are designed to mimic native ECM attachment motifs, promote optimal cell binding and signaling in a broad range of serum-free, xeno-free, and animal-free media formulations.

2



ENHANCED

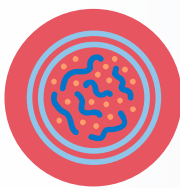
Treatments such as the Corning CellBIND® surface and Corning Primaria™ surface are engineered to optimize cell attachment, differentiation, and growth by modifying positive or negative surface charge.

3



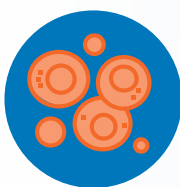
But How Do You Choose?

Ask these questions to help determine what cell culture surface is right for your cells.



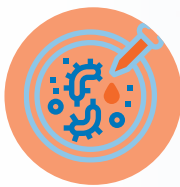
ORIGIN: *Where do your cells come from?*

ECM coated surfaces may be more suitable for fastidious cells, such as primary cultures, endothelial, and stem cells. Primary cells or stem cells are often used to develop 3D organoids. ECMs, such as Matrigel matrix, are the best substitute to support organoid culture.



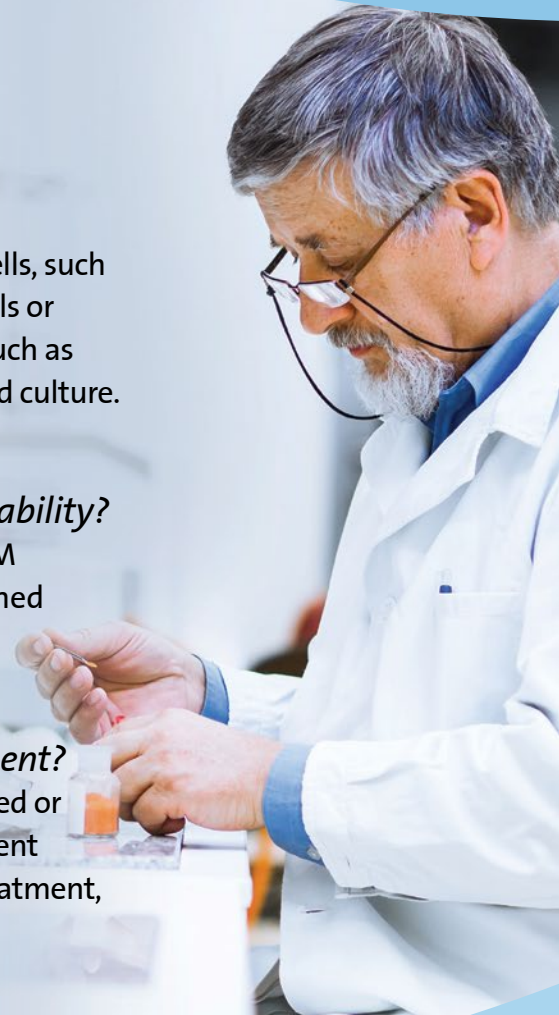
SPECIFIC: *Do you want to minimize biological variability?*

Mimetic surfaces may be best when the cell requires ECM support while the researcher's process needs a fully defined system with less biological interference and variability.



WORKFLOW: *Does your process reduce cell attachment?*

Enhanced surfaces may be considered when cells are assayed or cultured in certain conditions which promote cell detachment from the culture vessel, such as viral infection, chemical treatment, low-serum or serum-free culture, and vigorous washing.



Learn more about Corning cell culture surfaces:
Find out **which is right for your project.**

www.corning.com/lifesciences

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