Solve Hydrogel Floating

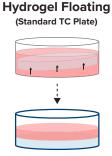
VitroPrime[™] Spread-Attach Plates for effortless and reliable hydrogel adherence and cell attachment



- Prevent Hydrogel Floating
- Eliminate Edge Effect
- More Even Hydrogel Surface

Offering unparalleled advantages for hydrogel-based 3D and 2D cell culture applications, the Vitro*Prime*[™] Spread-Attach Plates offer a unique surface treatment for superior hydrogel spreading, adherence, and uniform surface to eliminate the edge effect, solve the floating issue and uneven cell attachment to help promote rapid cell growth and improve cell yields.

When used with the VitroGel® hydrogel system, achieve more reproducible, consistent data even for challenging cell types requiring more uniform cell adherence and "unlock" for full automation potential.



Superior Hydrogel Adherence (VitroPrime[™] Spread-Attach)

VitroPrime[™] Spread-Attach Plates promotes hydrogel attachment to address floating issues which results to even imaging and ensure consistency.

Prevent Hydrogel Floating

Comparison of Hydrogel Adherence - VitroPrime™ Spread-Attach v. Others

We investigated the effectiveness of Vitro*Prime*[™] Spread-Attach and three other cell culture plates in mitigating the hydrogel floating issue using VitroGel[®] ORGANOID-3 hydrogel (Catalog # VHM04-3).

The method involves combining hydrogel and basal medium in a 2:1 ratio, followed by adding 300 μ L of VitroGel[®] ORGANOID-3 hydrogel mixture to each well of the 24-well plates. The hydrogel is incubated for 20 minutes, after which 300 μ L of cover medium is added on top. The plates are then incubated at 37°C to assess the ability of Vitro*Prime*TM Spread-Attach Plate to prevent hydrogel floating.

 VitroPrime™
 Premium Plate #1

 Spread-Attach 24-Well
 Premium Plate #1

 Image: Standard Plate #2
 Standard Plate #1

C000000



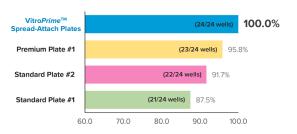
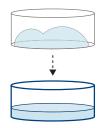


Figure 1. Comparison of hydrogel adherence on four different quality 24-well plates in 48 hours. A. VitroPrime™ Spread-Attach 24-Well plate exhibits perfect hydrogel adherence in all 24 wells. B. Premium Plate #1 showcases hydrogel adherence in 23 out of 24 wells. C. Standard Plate #2 exhibits hydrogel adherence in 22 out of 24 wells. D. Standard Plate #1 demonstrates hydrogel adherence in 21 out of 24 wells.



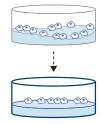
Ineffective Gel Spreading (Standard TC Plate)



Homogeneous Hydrogel Spreading (VitroPrime[™] Spread-Attach)

Achieve consistent surface coating and prevent edge effects for high reproducibility.

Uneven Hydrogel Surface (Standard TC Plate)



Uniform Hydrogel Surface (VitroPrime[™] Spread-Attach)

Ensure even cell attachment through the surface with VitroPrime™ Spread-Attach Plates and obtain consistent data.

Eliminate Edge Effect

Effective Hydrogel Surface Coating with VitroPrime[™] Spread-Attach Plate

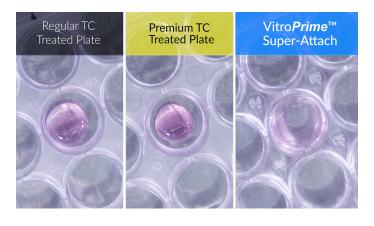


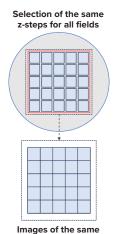
Figure 2. An overhead view capturing the distribution of hydrogel mixture across three distinct tissue culture treated plates (Regular TC, Premium TC, VitroPrime[™] Spread-Attach).

The hydrogels did not distribute homogeneously throughout the surface in the regular and premium tissue culture treated plates. In contrast, VitroPrime™ Spread-Attach Plate ensures even hydrogel spreading.

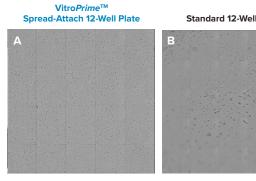
More Even Hydrogel Surface

Evaluating Gel Spreading and Cell Attachment VitroPrime[™] Spread-Attach 12-Well Plate v. Standard 12-Well Plate

We compared two 25-stitched z-planes capturing OP9 cells in the VitroGel® Hydrogel Matrix within 12-well plates— VitroPrime[™] Spread-Attach 12-Well Plate and a standard 12-well plate. The images were compiled by selecting the z-plane with the 2D projection on each plate and stitched to evaluate cell attachment and the flatness of the hydrogel surface. Notably, VitroPrime[™] Spread-Attach 12-Well Plate demonstrated superior performance, ensuring flat hydrogel surface for even gel spreading and cell attachment.



z-steps are stitched together



Standard 12-Well Plate

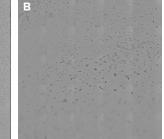


Figure 3. A comparison of two 25-stitched z-planes within a well of the 12-well plates. A. VitroPrime[™] Spread-Attach 12-Well Plate shows a flat hydrogel surface by presenting homogeous cell spreading and attachments on the same plane. B. Standard 12-well plate shows uneven hydrogel surface by showing attached cells in different focus plane.

Product	Cat. No.	Well No.	Well Size	Packaging Size
Vitro <i>Prime</i> ™ Spread-Attach Plates	VP-SA6W	6-well	9.5 cm ²	50 packs/case
	VP-SA12W	12-well	3.85 cm ²	50 packs/case
	VP-SA24W	24-well	1.9 cm ²	50 packs/case
	VP-SA48W	48-well	0.7 cm ²	50 packs/case
	VP-SA96W	96-well	0.3 cm ²	50 packs/case



Explore all our VitroPrime[™] and VitroGel®-Based products here:

www.thewellbio.com/product/ vitroprime-spread-attach-plates/



\$66-3D-CELLS (973.855.4955)

☑ info@thewellbio.com

🖮 thewellbio.com

in thewell-bioscience

© 2024 TheWell Bioscience, Inc. All rights reserved. For research use only. Not intended for use in diagnostics or therapeutic procedures. VitroGel® and VitroPrime™ is a trademark of TheWell Bioscience. All product names, logos, brands, trademarks and registered trademarks are property of their respective owners.