

WHAT IS IMPACTING YOUR MICROSCOPY?

TOP FEATURES OF YOUR SUBSTRATE THAT IMPACT RESULTS

Bottom Thickness

For demanding microscopic applications at higher magnifications, a larger bottom thickness can lead to a major reduction in resolution. This effect is exacerbated with oil or water immersion objectives.

Planarity

A flat, planar surface will provide excellent quality images when re-focusing is not an option as in high-speed and high-resolution microscopy.

Glass bottom surfaces will have the highest level of planarity available!

Autofluorescence

Poly-olefin plastics and glass have low levels of autofluorescence and are ideal for high content imaging. Additionally, utilizing a black well can help to quench any autofluorescence background.

Cross Talk/Bleaching

Cross talk can cause bleaching of samples in nearby wells. To counteract this issue, black well sides can be used to block out the light and guarantee that each cell demonstrates maximum signal strength at the beginning of the screening.

Surface Chemistry

The surface chemistry of untreated glass may not promote the attachment of your cells. A surface treatment on plastic or glass will enhance the binding of your cells and improve morphology. However, when attachment is not preferred, a glass bottom surface or cell repellent polystyrene may be ideal.

