

WimTube

Specifications for a successful analysis

In order to achieve the best results when using WimTube, these are some guidelines that you should follow while conducting your assay and acquiring images from it. If your images deviate from these guidelines, the accuracy of your WimTube analysis measurements might be negatively affected. Although we work our best to make our solution as adaptable as possible, we do not take responsibility of their accuracy if that is the case.

Please take care of your images, we will take care of the rest.

1. Before acquiring your images

Valid microscopy modalities: WimTube works best with images from fluorescence, phase contrast and brightfield microscopy. Nevertheless, it is engineered with flexibility to adapt to all kind of images, so it accepts images of the whole range of microscopy techniques used in tube formation assay with the aim to provide you with the automated analysis that best fits your needs.

Moderate cell density: WimTube needs a cell density lower than 75% of the image area for proper detection of the background. Please take it into account when preparing your assay.

Avoid artifacts: please take into account that any artifacts visible in the image (air bubbles, debris, stains...) may make it harder for the analysis to recognize your tubes and affect negatively your results. Please take care to avoid them when preparing your assay.

2. When acquiring your images

No visible containers: please avoid images containing parts or whole assay containers (plates, wells...). These structures can be confusing for the detection algorithm and lead to false positives.

Images in focus: images should be properly focused in order to allow vessels to be viewed with the best contrast and distinguish them from the background as clearly as possible.

Homogeneous illumination: achieving homogeneous lightning throughout the entire image will ensure better results. Please avoid images in which some parts of the image are darker or brighter than others.



3. When saving your images

Valid formats: WimTube only accepts images saved in jpg, jpeg, png, gif, tiff, tif and bmp formats. The image uploader will not let you upload images from other formats. If you want to analyze images from a special image format, you can ask for a custom solution here.

38

Good image resolution: small images (low resolution) usually show small or poorly defined objects that are difficult to distinguish from the background. The minimum resolution that we accept is 800 pixels by 600 pixels.

No additional information visible on the image: some microscope software add information to the images like a scale bar or a time-stamp, which can make cells around them more difficult to detect. Please send your images without any extra information on them.