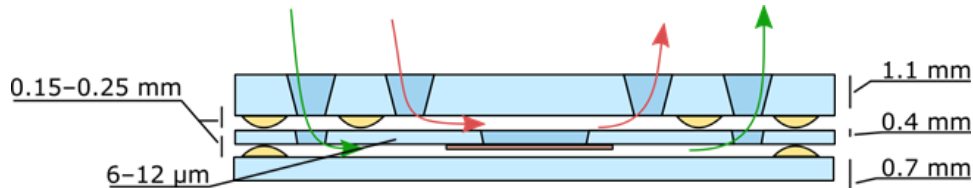


Compatibility with cell imaging systems

Micronit's standard Organ-on-a-chip device is made of three layers of highly transparent material (glass) and is compatible with live cell imaging.

The maximum magnification that can be achieved is determined by the working distance of the objective to be used. The following schematics show the position of the cell culture membrane (red rectangle in the center of the chip); in order to be able to image the cells, a minimum working distance of 0.9 mm is required.



High numerical aperture objective can make imaging more difficult, since the metal part of the objective can hit the chip holder, moving the chip.

For high resolution imaging, it is recommended to do a terminal measurement. This is easily done thanks to the resealable technology at the base of Micronit's device, allowing you to reopen the chip at the end of the experiment, remove the membrane carrier (Middle layer) and perform staining, cell fixation and confocal microscopy in the same way it could be done with a coverslip.

An example can be found in the following image, kindly provided by RIKILT (Meike van der Zande)

