

## microculture array

The microculture arrays are a range of silicone chambers that can be used for immunofluorescence or live cell imaging. The millimeter sized wells easily confine media/cells to a defined location and area on a glass slide. When used for immunofluorescence they allow for standard cultivation, staining and mounting and when used for live cell imaging ensure confinement and isolation of cells for short term imaging.

---

### Material

The microculture arrays are manufactured from a bio-compatible self-adhesive silicone material in black (poly dimethylsiloxane (PDMS), Sylgard 170) and are mounted on a glass slide (soda lime glass, ground edges) with a frosted end. The polymer material is gas permeable and can be used inside an incubator.

Optional coverslips (60 x 24mm) #1.5, non-sterile.

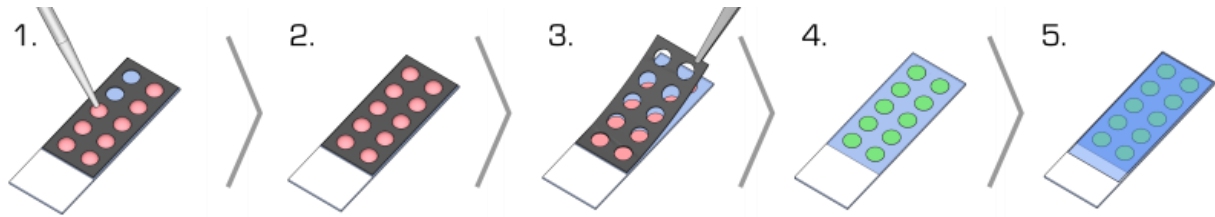
While the arrays are autoclavable and compatible with some alcohols we do not recommend reusing them.

### Shipping, storage and handling

The microculture arrays are sterilized and packaged in a protective slide container and transported in a vacuum sealed bag. The shelf life under typical storage conditions (room temperature, no direct sunlight) is 12 months.

Always use gloves and tweezers when working with the microculture arrays as contamination (e.g. dust, oils,...) from the skin can affect the adhesion of the arrays.

### Protocol for using a microculture array - immunofluorescence



1. Place the microculture array into a 100mm culture dish and pipette the cell suspension directly into the isolated wells in the removable silicone array.

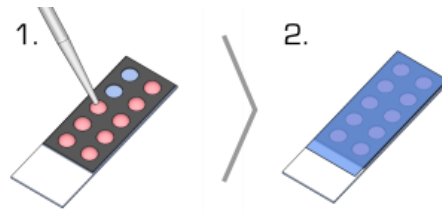
**NOTE:**

Typical well volume for pipetting cell suspension for cultivation.

- 1 well – 250 $\mu$ L
- 2 well – 250  $\mu$ L
- 3 well – 200  $\mu$ L
- 10 well – 50  $\mu$ L
- 40 well – 8  $\mu$ L

2. Cover the culture dish with a lid to reduce evaporation and incubate the cells following standard procedures.
3. Remove the silicone array by gently lifting a corner with tweezers and peeling the array off the glass slide. NOTE: this step can be performed after fixing/staining.
4. Perform standard staining protocols on the slide (fixation, permeabilization, staining, washing).
5. Seal a coverslip (60 x 24mm) onto the glass slide with your choice of mounting medium.

## Protocol for using a microculture array – live cell imaging



1. Place the microculture array into a 100mm culture dish and pipette the cell suspension directly into the isolated wells in the removable silicone array.

**NOTE:**

Typical well volume for pipetting cell suspension for live cell imaging.

- 1 well – 100 $\mu$ L
- 2 well – 100  $\mu$ L
- 3 well – 70  $\mu$ L
- 10 well – 20  $\mu$ L
- 40 well – 4  $\mu$ L

2. Seal the array with a coverslip (60 x 24mm) by gently pressing the coverslip down onto the array.