MAXIMUM STANDARD MINIMUM TECHNICAL INFORMATION VOLUME (μL) VOLUME (µL) VOLUME (µL) Solo 300 200 125 2 10 **Ouartet** 2 Nonet Presto 30 20 8 Allegro 30 20 8



STC-P 03.02.21

Stencell PROTOCOL









1. The material you need

This protocol was made with the Presto design.

- Micropipettes and tips
- Cell culture substrate
- Cell culture medium and cells: up to 2 cell types in the barrier configuration
- Optional: Kimwipe®, deionized water and 1 scalpel.

2. Storage

- Stencell can be stored in their protective foil for up to 2 years.
- **Property** Do not remove the protective foil.

3. Stencell handling

 Using tweezers, remove the protective layer on the Stencell.



Softly remove the inner elements.



- Use 2 tweezers to press close to the junction in order to avoid breaking the Stencell. Alternatively, you can cut the junctions with a scalpel.
- Remove the Stencell from the lower adhesive layer.



Put it on top of your culture substrate.



Softly remove the bubbles and stick the Stencell, patting it with tweezers.



4. Loading the cells / cells confinement

- Detach the cells and resuspend them in appropriate cell culture medium.
- Fill the wells of your Stencell with the medium containing the cells: add the standard volume (e.g. 20 μL).



Depending on the substrate hydrophobicity, the droplet might not completely fill the well. You can: Either fill the well with the standard volume. Then, help the droplets stick to the Stencell by connecting the liquid next to the Stencell walls using the pipette tip.

Or, you may add an excess volume of liquid (e.g. 30 μ L) and remove it afterwards (e.g. 10 μ L).

Caution: do not overfill (e.g. > 30 µL) the wells, otherwise two droplets may merge.

- Put your substrate and cells in the incubator. Wait for 1 to 2 hours until cells spread and fully occupy the windows space.
- If you need to wait longer, pay attention to the fact that the droplets do not completely evaporate. Do not incubate more than 12 hours without renewing the medium.



Once the cells have adhered to the bottom of the well, fill the petri dish with your culture medium so that you can start the long-term culture.



5. Wound-healing / cell migration

Remove the Stencell from the petri dish, proceed softly to avoid disturbing the cells.



Start the image acquisition.

