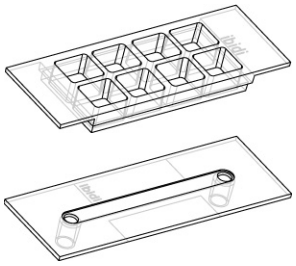


The sticky–Slide family allows you to perform cell culture experiments with custom–specific bottom materials like plastic sheets, glass slides, spotted coverslips, printed circuit boards, etc. The self adhesive (”sticky”) underside of the bottomless blank slide is easily adapted to your specific substrate by pressing on by hand.
sticky–Slide 8 well provides a common open well format which is best suited for maximum sample access, e.g. when cells have to be seeded onto a titanium implant material.
sticky–Slides I Luer are designed for perfusion applications and applying defined shear stress and shear rates on cells inside the channel.

Material

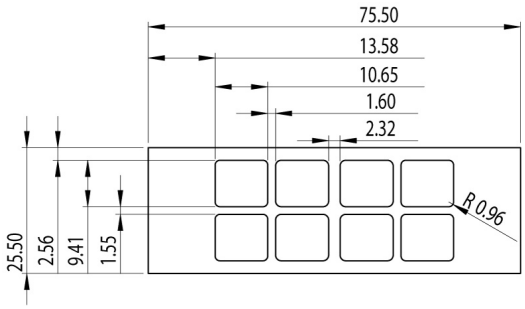
The slide material of sticky–Slides is identical to common µ–Slides (uncoated). The Slides are not autoclavable since they are temperature stable up to 60°C/140°F only. All sticky–Slides are delivered sterile and single packed. Please keep in mind that sterility is lost when non–sterile substrates are used.
The sticky bottom itself is a 50 µm biocompatible double–faced adhesive tape. The tape is covered by a protection film which has to be removed before usage.

Geometry

All technical details beside bottom material are identical to µ–Slide 8 well and µ–Slide I Luer respectively. The Slides provide standard slide format according to ISO 8037/1.

Geometry of sticky–Slides 8 well

Geometry of sticky–Slide 8 well	
Number of wells	8
Dimension of wells ($w \times l \times h$) in mm	$9.4 \times 10.7 \times 6.8$
Recommended volume per well	300 µl
Total height with lid	8 mm
Growth area per well	1.0 cm^2
Bottom	none

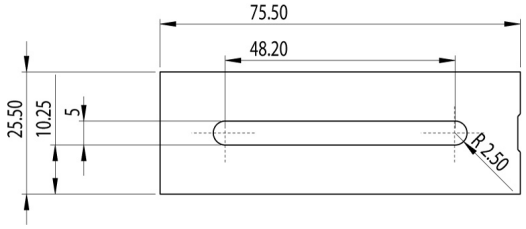


Geometry of sticky–Slides I Luer

Please keep in mind that the channel height is formed by the channel height itself (100 µm...800 µm) plus the thickness of the adhesive tape (depending on contact pressure, max. 50 µm).

Geometry of sticky–Slides I Luer		
General		
Growth area		2.5 cm^2
Recommended volume per reservoir		60 µl
Bottom		none
Specific		
Product name	channel height	channel volume
sticky–Slide I $^{0.1}$ Luer	100 µm*	25 µl**
sticky–Slide I $^{0.2}$ Luer	200 µm*	50 µl**
sticky–Slide I $^{0.4}$ Luer	400 µm*	100 µl**
sticky–Slide I $^{0.6}$ Luer	600 µm*	150 µl**
sticky–Slide I $^{0.8}$ Luer	800 µm*	200 µl**

*+ max. 50 µm **+ max. 12.5 µl

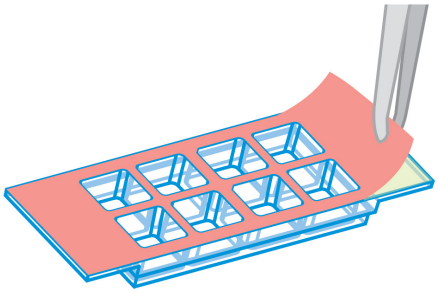


Solvents for Fixation, Staining and Other Purposes

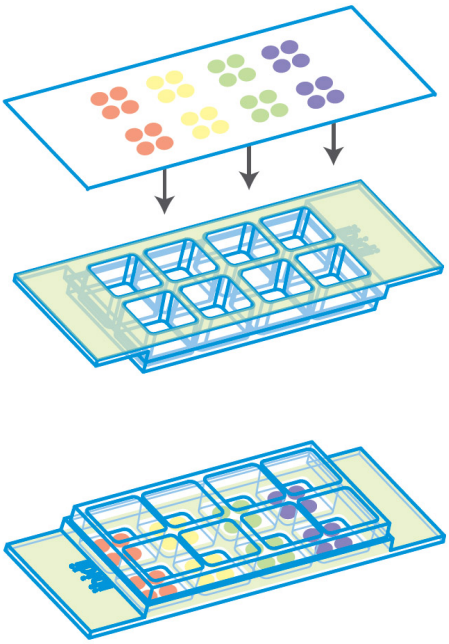
The sticky bottom material and the slide material are compatible to Methanol, acids, alkalis, PFA, DMSO, and silicon oil AR200. Please keep in mind that these substances may be harmful to the used substrate.

Handling and Assembling

- Prepare your sample and/or bottom material.
- Remove the protection film by using sterile tweezers.



- Optionally for sticky–Slides I Luer, place your sample into the channel.
- Mount bottom and sticky–Slide with some pressure. Press well.



- Conduct your experiment.

The adhesive strength strongly depends on temperature and time. Best results are achieved after 1 hour at room temperature or 20 min at 37 C. Anyhow, sticky–Slides are not leaky immediately after assembling.

sticky–Slides can be removed from the substrate by dipping them into Acetone over night in an appropriate glass container (e.g. a beaker). Please keep in mind that Acetone might be harmful to your used substrate. Once removed sticky–Slides cannot be reused.

Surfaces compatibility

sticky–Slides are compatible with all flat, clean, dust–free, fat–free surfaces like glass, plastic, metal, silicium or electrode structures. The assembly of sticky–Slides and bottom material also works well when assembled with protein–free aqueous solutions like water or PBS buffer. sticky–Slides are not working on dusty or fatty surfaces like wax foils or similar surfaces. Please test your specific surface by yourself with free samples from www.ibidi.com.

Seeding cells

sticky–Slide 8 well

- Trypsinize and count cells as usual. Dilute the cell suspension to the desired concentration. Depending on your cell type, application of a 4–9 $\times 10^4$ cells/ml suspension should result in a confluent layer within 2–3 days.
- Apply 300 µl cell suspension into each well of the Slide. Avoid shaking as this will result in inhomogeneous distribution of the cells.
- Cover reservoirs with the supplied lid. Incubate at 37°C and 5 % CO_2 as usual.

Undemanding cells can be left in their seeding medium for up to three days and grow to confluence there. However, best results might be achieved when the medium is changed every 1–2 days. Carefully aspirate the old medium and replace it by 300 µl/well fresh medium.

sticky–Slide I Luer

- Trypsinize and count cells as usual. The cell density after seeding strongly depends on the channel's height. We recommend the following cell concentrations and volumes:

Product name	volume	cell concentration
sticky–Slide I $^{0.1}$ Luer	25 µl*	$12 - 28 \times 10^5$ c/ml
sticky–Slide I $^{0.2}$ Luer	50 µl*	$6 - 14 \times 10^5$ c/ml
sticky–Slide I $^{0.4}$ Luer	100 µl*	$3 - 7 \times 10^5$ c/ml
sticky–Slide I $^{0.6}$ Luer	150 µl*	$2 - 4.5 \times 10^5$ c/ml
sticky–Slide I $^{0.8}$ Luer	200 µl*	$1.5 - 3.5 \times 10^5$ c/ml

*+ max. 12.5 µl

- Apply the volume directly into the channel. The recommended cell concentration should result in a 50 % optical confluence layer after 24h.
- Cover reservoirs with the supplied caps. Incubate at 37°C and 5 % CO_2 as usual.
- After cell attachment fill each reservoir with 60 µl medium.
- The Slide is now ready for applying flow conditions on the adherent cells. Don't trap air bubbles when plugging in the connecting tubes.

Depending on the cells we recommend exchanging the medium every day in static culture: Aspirate both reservoirs. Flush fresh medium inside the channel by filling one reservoir with 400 µl medium and removing the content of the reservoir from the other well, ensuring the channel is never dry. Leave both reservoirs filled with approx. 60 µl each.

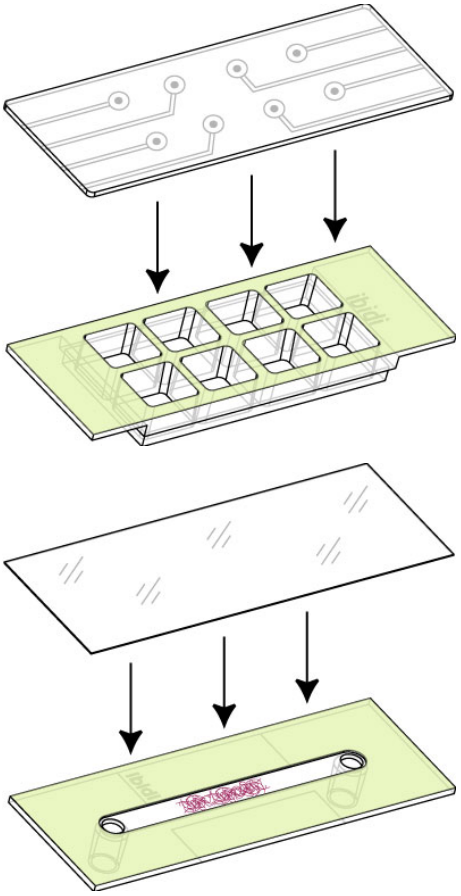
Tip:

The day before seeding the cells we recommend placing the cell medium and slides into the incubator for equilibration. This will prevent the liquid inside the slide or channel from emerging air bubbles over the incubation time.

Applications

sticky–Slide 8 well provides a common open well format which is best suited for maximum sample access, e.g. when cells have to be seeded onto a titanium implant material.

sticky–Slides I Luer are designed for perfusion applications and applying defined shear stress and shear rates on cells inside the channel. The female Luer adapters allow easy connections to tubing and pump systems. Several other cell culture applications are possible, e.g. insertion of tissue samples or spheroids into channel slides. The sticky–Slides I Luer are available in five versions which only differ in their channels' heights and channel volumes.



sticky–Slide family

The sticky–Slide technology is available with different slide formats. Please see table below for choosing your sticky–Slide.

Product name	Ordering number	Based on µ–Slide format	Characteristics
sticky–Slide 8 well	80828	µ–Slide 8 well	8 open wells (volume 300 µl)
sticky–Slide I $^{0.1}$ Luer	81128	µ–Slide I $^{0.1}$ Luer	channel slide (height 100 µm)
sticky–Slide I $^{0.2}$ Luer	80168	µ–Slide I $^{0.2}$ Luer	channel slide (height 200 µm)
sticky–Slide I $^{0.4}$ Luer	80178	µ–Slide I $^{0.4}$ Luer	channel slide (height 400 µm)
sticky–Slide I $^{0.6}$ Luer	80188	µ–Slide I $^{0.6}$ Luer	channel slide (height 600 µm)
sticky–Slide I $^{0.8}$ Luer	80198	µ–Slide I $^{0.8}$ Luer	channel slide (height 800 µm)
glass coverslips, sterile	10801		25.0 mm × 75.0 mm, No. 1.5 (selected quality, 170 µm ± 10 µm)
glass coverslips, unsterile	10812		25.0 mm × 75.0 mm, No. 1.5 (selected quality, 170 µm ± 10 µm)

For research use only!

Further technical specifications can be found at www.ibidi.com. For questions and suggestions please contact us by e–mail *info@ibidi.de* or by telephone +49 (0)89/520 4617 0. All products are developed and produced in Germany.