

The sticky-Slide family allows you to perform cell culture experiments with custom-specific bottom materials like plastic sheets, glass coverslips, etc. The self adhesive ("sticky") underside of the bottomless blank slide is easily adapted to your specific bottom substrate.

The sticky-Slide Chemotaxis is a tool for investigation of chemotaxis and migration of non-adherent or adherent cells in gel matrices. The chamber's geometry is optimized for analyzing chemotaxis by video microscopy. The linear concentration profile which is required for chemotactical movement is generated by diffusion and stable for at least 48 hours.

The sticky version can be used to insert material into the large reservoirs or for assembling with custom-specific bottom materials, like glass coverslips or structured substrates.

Please read the following Application Notes for more detailed information:

Application Note 17 "2D and 3D Chemotaxis Assays using μ -Slide Chemotaxis" and Application Note 23 "3D Chemotaxis Protocol with Collagen I Gel for Dendritic Cells".

Material

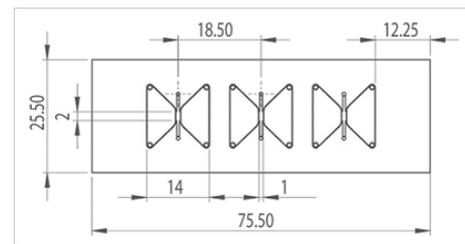
The slide material of sticky-Slides is identical to μ -Slides. All sticky-Slides are delivered sterilized and single packed. Please keep in mind that sterility is lost when non-sterile substrates are used. The sticky-Slides are not autoclavable since they are temperature stable up to 60°C/140°F only.

The sticky bottom itself is a 50 μ m 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 Chemotaxis. The Slides provide standard slide format according to ISO 8037/1.

Geometry of the sticky-Slide Chemotaxis	
Outer dimensions in mm (w×l)	25.5 × 75.5
Chambers on slide	3
Volume per chamber	140 μ l
Observation area	2 × 1 mm ²
Coating area per chamber	
-When coating full chamber	3.5 cm ²
-When coating observation area only	0.27 cm ²
Distance between chambers	18.5 mm
Total height with plugs	12 mm
Volume chemoattractant	30 μ l
Bottom	none



Shipping and Storage

The μ -Slides, μ -Dishes and μ -Plates are sterilized and welded in a gas-permeable packaging. The shelf life under proper storage conditions (in a dry place, no direct sunlight) is listed in the following table.

Conditions	
Shipping conditions	Ambient
Storage conditions	RT (15-25°C)
Shelf Life	
sticky-Slides	36 months

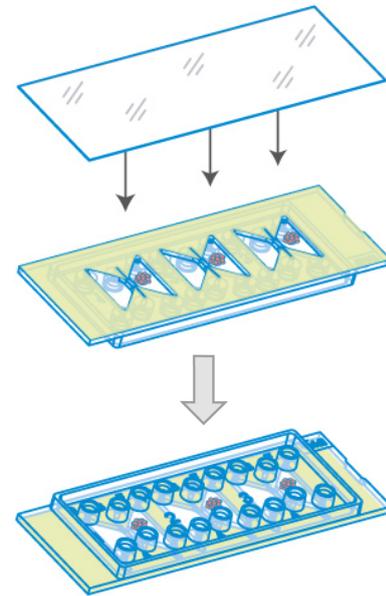
Handling and Assembling

Assemble the sticky-Slides with a convenient bottom material, matching your experimental needs.

- Prepare your sample and/or bottom material.
- Remove the protection film of the sticky-Slides.
- Mount bottom and sticky-Slide. Press firmly until the bottom is completely sealed. Make sure there is

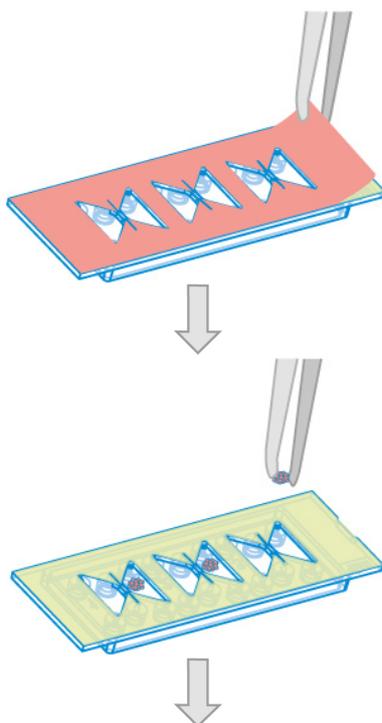
no air left between sticky-Slide and the bottom material by applying precise pressure with fingers. To confirm strong adhesion, invert the sticky-Slide and check for air gaps. If air gaps are found, press them out of the adhesive interface.

- For best results, use our Clamp for sticky-Slides (ibidi, 80040) after assembly.
- Incubate the assembled sticky-Slide at 37°C for 8 hours in a dry or humid incubator.
- Conduct your experiment.



Optional: Sample Insertion into Channels

For channel structures, samples can be inserted before assembling sticky-Slide and bottom material. In case a sample must not dry, rinse the sample with protein-free buffer solution to ensure a maximum of adhesion. Place the sample into the channel and mount the bottom material. Keep in mind that wet samples, especially in culture medium with high protein concentration might interfere with proper sticky-Slide performance. Start with the experiment immediately after assembly.



Surface Compatibility

sticky-Slides are compatible with flat, clean, dust-free, fat-free surfaces like glass coverslips, plastic, metal, or electrode structures. Best results are achieved with completely dry surfaces. Dusty or fatty surfaces like wax foils, lipids or similar surfaces are not compatible. Please test your specific surface in your lab with a free sample from www.ibidi.com.

Seeding Cells

Please read the following Application Note for more detailed information:

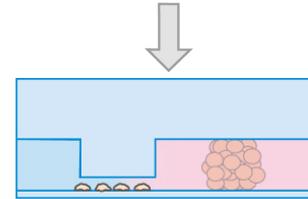
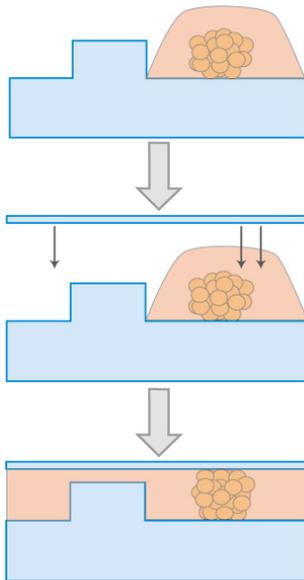
Application Note 17 "2D and 3D Chemotaxis Assays using μ -Slide Chemotaxis": This AN contains a detailed protocol for 2D and 3D gel assays with μ -Slide Chemotaxis. This protocol can directly be used for the sticky-Slide Chemotaxis.

Disassembly of sticky-Slides

sticky-Slides can be removed from the substrate by dissolving the sticky bottom with acetone. Once the sticky bottom is removed sticky-Slides cannot be reused. Dip the assembled sticky-Slide 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.

Applications

The sticky-Slide Chemotaxis is a special geometry for creating stable concentration gradients. The sticky technology allows insertion of cell clusters which cannot easily be pipetted, like spheroids or tissue samples. Those samples can be used as chemoattractant producers or used in gels for e.g. endothelial cell sprouting assays.



Solvents for Fixation, Staining and Other Purposes

The material is compatible to most fixatives, like acidic acid, alcohols, aldehydes and PFA. Please keep in mind that these substances may be harmful to the mounted bottom material. Acetone is not compatible. For a full list of compatible solvents and more information on chemical compatibility, please visit the FAQ section on www.ibidi.com. For optimal results in fluorescence microscopy and storage of stained probes ibidi provides a mounting medium (50001) optimized for μ -Dishes and μ -Slides.

Immersion Oil

The compatibility with immersion oil depends on the used substrate.

Ordering Information

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

sticky–Slides

Cat. No.	Description
80828	sticky–Slide 8 Well: sterilized
80608	sticky–Slide VI ^{0.4} : sterilized
80328	sticky–Slide Chemotaxis: sterilized
81128	sticky–Slide I ^{0.1} Luer: sterilized
80168	sticky–Slide I ^{0.2} Luer: sterilized
80178	sticky–Slide I ^{0.4} Luer: sterilized
80188	sticky–Slide I ^{0.6} Luer: sterilized
80198	sticky–Slide I ^{0.8} Luer: sterilized
10812	Coverslips for sticky–Slides: #1.5H (170 µm ±5 µm) D 263 M, Schott glass, 25 mm × 75 mm, unsterile
10813	Coverslips for sticky–Slides Uncoated: #1.5 polymer coverslip, 25 mm × 75 mm, unsterile
10814	Coverslips for sticky–Slides ibiTreat: #1.5 polymer coverslip, tissue culture treated 25 mm × 75 mm, unsterile

Clamp for sticky–Slides

Cat. No.	Description
80040	Clamp for sticky–Slides
80041	Adapter for sticky–Slide 8 Well
80042	Adapter for sticky–Slide I Luer
80043	Adapter for sticky–Slide VI ^{0.4}
80044	Adapter for sticky–Slide Chemotaxis

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.
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