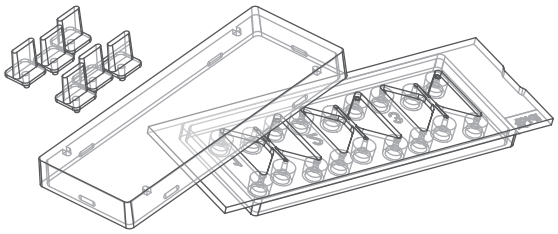
sticky-Slide Chemotaxis

Instruction Manual



The sticky-Slide family allows you to perform cell culture experiments with custom-specific bottom materials such as polymer films, glass coverslips, etc. The self-adhesive “sticky” underside of the bottomless, blank slide can be easily adapted to your specific bottom substrate.
The sticky-Slide Chemotaxis is ideal for the investigation of chemotaxis of fast or slow migrating adherent and non-adherent cells in 3D gel matrices or on custom-specific bottom materials (e.g., glass coverslips or structured substrates). The chamber’s geometry is optimized for analyzing chemotaxis by live cell imaging, with stable chemotactic gradients also in long-term experiments.

This document applies to the following product:

80328	**sticky-Slide Chemotaxis**

Material

The material of sticky-Slides is identical to that of µ-Slides. All sticky-Slides are delivered sterilized and individually packed. Please keep in mind that sterility is lost when non-sterile substrates are used. The sticky-Slides are not autoclavable, as they are only temperature-stable up to 60 °C/140 °F.
The sticky bottom itself is a 50 µm biocompatible double-faced adhesive tape. The tape is covered by a protection film, which must be removed before usage.

Shipping and Storage

The sticky-Slides are sterilized and sealed in a gas-permeable packaging. The shelf life under proper storage conditions (in a dry place, no direct sunlight) is outlined in the following table.

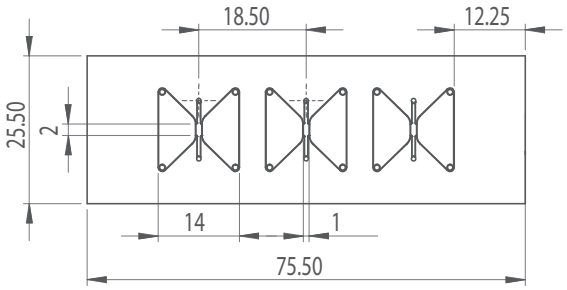
Conditions	
Shipping conditions	Ambient
Storage conditions	RT (15–25 °C)

Shelf Life	
sticky-Slides	36 months

Geometry

Apart from the bottom material, all technical details are identical to those of the µ-Slide Chemotaxis. The sticky-Slides provide standard slide format according to ISO 8037/1.

Specifications	
Outer dimensions (w × l)	25.5 × 75.5 mm^2
Chemotaxis chambers on slide	3
Volume per chamber	130 µl
Observation area	2 × 1 mm^2
Height of reservoirs	1.05 mm
Total height with plugs	12 mm
Volume chemoattractant	30 µl
Bottom	none



Surface Compatibility

sticky-Slides are compatible with flat, clean, dust-free, fat-free surfaces, such as glass coverslips, plastic, metal, or electrode structures. Best results are achieved with completely dry surfaces. Please test your specific surface with a free sample from ibidi.com.

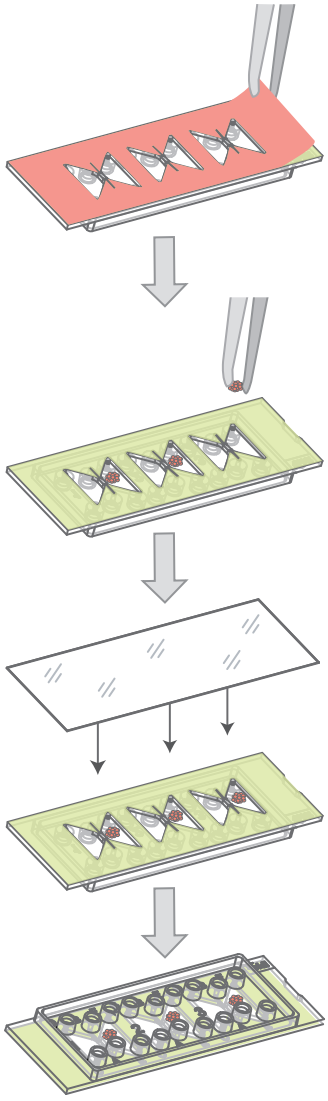
Handling and Assembly

Assemble the sticky-Slide with a convenient bottom material, matching your experimental needs. The following steps describe the process of assembling:

1. Prepare your sample and/or bottom material.
2. Remove the protection film of the sticky-Slide.
3. Mount bottom material and sticky-Slide by pressing firmly with your fingers (use gloves) until the bottom is completely sealed. Make sure there is no air between the sticky-Slide and the bottom material.
4. To confirm strong adhesion, invert the sticky-Slide and check for air gaps. If air gaps are detected, remove them by pressing on the adhesive interface. For best results, use our Clamp for sticky-Slides (ibidi, 80040) and the corresponding adapter after assembly.
5. For a maximum of adhesion, incubate the assembled sticky-Slide at 37 °C for 8 hours in a dry or humid incubator.

Optional: Direct Sample Insertion Into Channels

The sticky-Slide technology allows for the insertion of samples (e.g., cell clusters, which cannot easily be pipetted, such as spheroids or tissue samples) before the sticky-Slide and bottom material are assembled. In case a sample must not dry out, rinse it with a protein-free buffer solution to ensure a maximum of adhesion. Then, place the sample into the channel and attach the bottom material. Be aware that wet samples, especially those in a culture medium with high protein concentration, might affect the sticky-Slide's performance. Start with the experiment immediately after assembly.



Seeding Cells

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

Disassembly

To remove sticky-Slides from the substrate, dissolve the adhesive bottom with acetone. Place the sticky-Slide overnight in a suitable, acetone-filled glass container (e.g., a beaker). Be aware that acetone may damage the used substrate. Once the sticky bottom is removed, the sticky-Slides cannot be reused.

Chemical Compatibility

The following table provides basic information on the chemical and solvent compatibility of the sticky-Slide Chemotaxis. For a full list of compatible solvents and more information on chemical compatibility, visit ibidi.com/chemicals.

Chemical / Solvent	Compatibility
Methanol	Yes
Ethanol	Yes
Formaldehyde	Yes
Acetone	No
Mineral oil	Yes
Silicone oil	Yes
Immersion oil	See Section “Immersion Oil”

Immersion Oil

The compatibility with immersion oil depends on the used substrate.

Related Documents

Please read the following documents for detailed information:

- Instruction “µ-Slide Chemotaxis”
- Application Note 23: 3D Chemotaxis Protocol with bovine Collagen I Gel for Dendritic Cells.
- Application Note 26: Preparation of Collagen I Gels.

For research use only!

Further information can be found at ibidi.com. For questions and suggestions, please contact us by e-mail at info@ibidi.com or by telephone at +49 (0)89/520 4617 0.