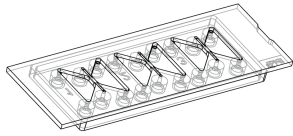


Instructions

sticky-Slide Chemotaxis 3D



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.

The sticky-Slide Chemotaxis 3D 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 through aqueous gels 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 "3D Chemotaxis Assays using μ -Slide Chemotaxis 3D" and Application Note 23 "3D Chemotaxis Protocol with Collagen I Gel for Dendritic Cells".

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 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 3D. The Slides provide standard slide format according to ISO 8037/1.

Geometry μ -Slide Chemotaxis 3D

Chambers on slide	3
Volume per chamber	140 μ l
Observation area	2 \times 1 mm ²
Total height with plugs	12 mm
Volume chemoattractant	30 μ l
Bottom	none

Handling and Assembling

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

- Optionally for channel sticky-Slides, place your sample into the channel.
- Mount bottom and sticky-Slide with some pressure. Press well until the bottom is sealed.
- Incubate at 20-40°C for best results.
- Conduct your experiment.

The adhesive strength strongly depends on temperature and time. Best results are achieved by storing the assembled Slides over night at 20-40°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.

Surface compatibility

sticky-Slides are compatible with all flat, clean, dust-free, fat-free surfaces like glass, plastic, metal, silicium or electrode structures. sticky-Slides can be assembled with wet surfaces (protein-free, aqueous solutions like water or PBS buffer). Dusty or fatty surfaces like wax foils or similar surfaces are not compatible. Please test your specific surface in your lab with free samples from www.ibidi.com.

Best results are achieved when flexible substrates like plastic sheets or coverslips are used. Rigid glass slides or metal surfaces are also possible to use but need more pressure to seal.

Seeding cells

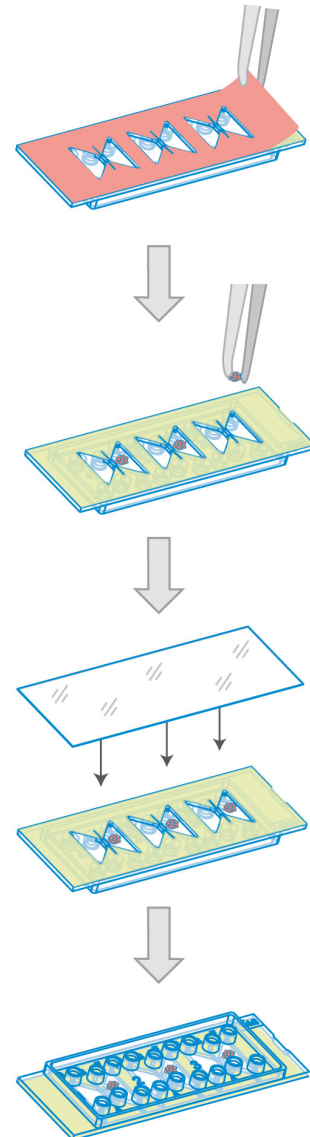
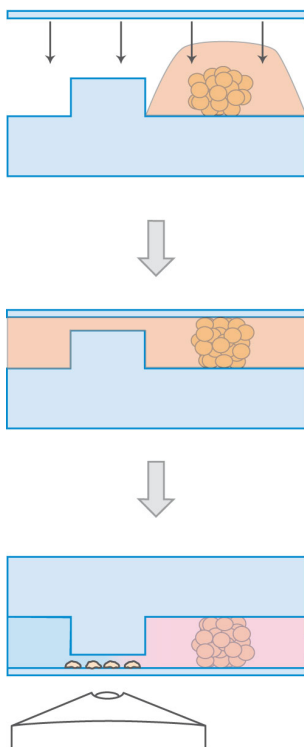
Please read the following Application Notes for more detailed information:

Application Note 17 "3D Chemotaxis Assays using μ -Slide Chemotaxis 3D": This AN contains a general protocol for 3D gel assays with μ -Slide Chemotaxis 3D. There is also detailed handling information.

Application Note 23: "3D Chemotaxis Protocol with Collagen I Gel for Dendritic Cells": This AN provides an example protocol for chemotaxis of Dendritic cells in a collagen gel.

Applications

sticky-Slide Chemotaxis 3D 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 sticky bottom material and the slide material are compatible to Methanol, acids, alkalis, PFA, DMSO, and silicone oil. Please keep in mind that these substances may be harmful to the used substrate. Acetone is not compatible with the sticky material so it can be used to detach slide and substrate after use.

Immersion Oil

Immersion oil compatibility depends on the used substrate.

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 μ l)
sticky–Slide VI ^{0.4}	80328	μ –Slide VI ^{0.4}	channel slide (height 400 μ m)
sticky–Slide Chemotaxis 3D	80608	μ –Slide Chemotaxis 3D	for chemotaxis experiments
sticky–Slide I ^{0.1} Luer	81128	μ –Slide I ^{0.1} Luer	channel slide (height 100 μ m)
sticky–Slide I ^{0.2} Luer	80168	μ –Slide I ^{0.2} Luer	channel slide (height 200 μ m)
sticky–Slide I ^{0.4} Luer	80178	μ –Slide I ^{0.4} Luer	channel slide (height 400 μ m)
sticky–Slide I ^{0.6} Luer	80188	μ –Slide I ^{0.6} Luer	channel slide (height 600 μ m)
sticky–Slide I ^{0.8} Luer	80198	μ –Slide I ^{0.8} Luer	channel slide (height 800 μ m)
glass coverslips, unsterile	10812		25.0 mm \times 75.0 mm, No. 1.5 (selected quality, 170 μ m \pm 10 μ m)

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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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