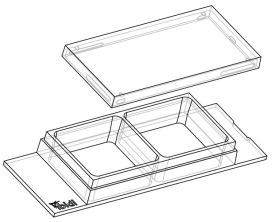


The ibidi product family is comprised of a variety of µ–Slides and µ–Dishes, which have all been designed for high–end microscopic analysis of fixed or living cells.

The glass bottom versions of the µ–Slides and µ–Dishes are especially designed for TIRF, super resolution and single molecule applications. The µ–Slide 2 Well Glass Bottom is an array of 2 square fields where cells can be cultivated and, subsequently, investigated with microscopical methods. It is intended for the optimization of experimental parameters like antibody dilution, seeding density, or the most effective drug concentration.

Material

The glass bottom version of the µ–Slides are made of a standard µ–Slide but with a glass coverslip bottom. It is not possible to detach the bottom. The µ–Slides are not autoclavable since they are temperature stable only up to 80°C / 175°F.

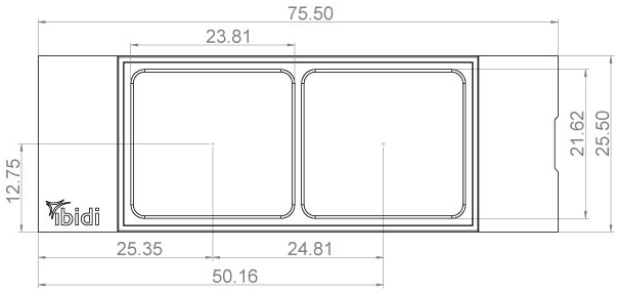
Optical Properties ibidi Glass Bottom	
Refractive index n_D	1.523
Abbe number	55
Thickness	No. 1.5H (selected quality 170 µm, ± 5 µm)
Material	Schott borosilicate glass, D 263M

Attention!

Be cautious when handling ibidi labware products with glass bottom! The glass coverslip or glass slide is very fragile and might break easily. Handle with care to avoid physical injury and damage to devices through leakage of the medium.

Geometry

The µ–Slide 2 Well Glass Bottom provides a standard slide format according to ISO 8037/1.



Geometry of µ–Slide 2 Well Glass Bottom	
Outer dimensions in mm (w × l)	25.5×75.5
Number of wells	2
Dimensions of wells in mm (w × l × h)	21.6 × 23.8 × 9.3
Volume per well	1.5 ml
Total height with lid	10.8 mm
Growth area per well	5.1 cm^2
Coating area per well	7.5 cm^2
Bottom	Glass Bottom

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 of Different Surfaces	
ibiTreat, Glass Bottom, ESS	36 months
Collagen, Poly-L-Lysine	18 months

Surface

The µ–Slide 2 Well Glass Bottom is manufactured with an uncoated glass coverslip. Washing steps (e.g. with PBS) before cell seeding can remove glass dust which is advantageous for direct cell growth on the surface.

Coating

Specific coatings are possible following this protocol:

1. Prepare your coating solution according to the manufacturer's specifications or reference.
2. Apply 1.5 ml and leave at room temperature for at least 30 minutes.
3. Aspirate the solution and wash with the recommended protein dilution buffer.
4. Optionally let dry at room temperature. Attention, some coating proteins might degenerate when drying!

Detailed information about coatings is provided in Application Note 08 Cell culture coating.

Cell Microscopy and Solvents for Fixation

To analyze your cells, no special preparations are necessary. Cells can be observed live, or fixed directly in the µ–Slide 2 Well Glass Bottom, preferably on an inverted microscope. Due to the thin bottom, high resolution microscopy is possible. The material is compatible to most fixatives, like acidic acid, alcohols and PFA. 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.

Seeding Cells

- Trypsinize and count cells as usual. Dilute the cell suspension to the desired concentration. Depending on your cell type, application of a 5-11 × 10^4 cells/ml suspension should result in a confluent layer within 2–3 days.
- Apply 1.5 ml cell suspension into each well of the slide. Avoid shaking as this will result in inhomogeneous distribution of the cells.
- Cover the slide 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 1.5 ml fresh medium per well.

Tip:

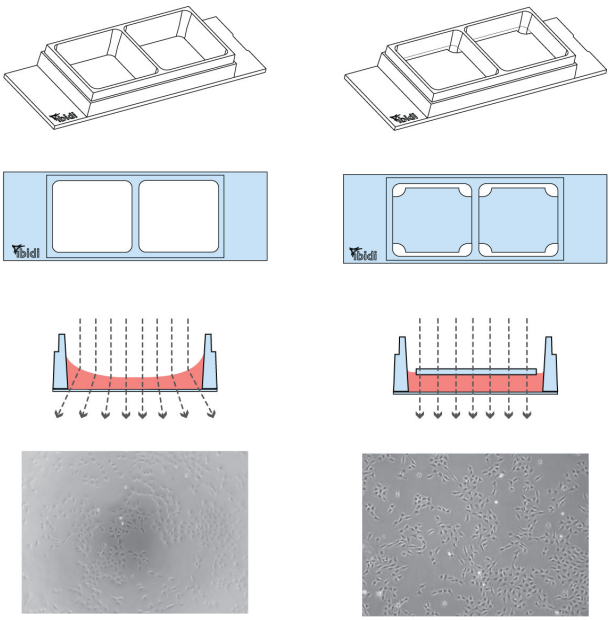
As you may know from the 96 well plates, a bent meniscus at the air–liquid interphase in small open wells will destroy the phase contrast effect of your microscope image. Use the Ph+ version to overcome this disturbing effect.

Immersion Oil

When using ibidi Glass Bottom products with oil immersion objectives, there is no known incompatibility with any immersion oil on the market. All types of immersion oils can be used.

µ–Slide 2 Well Selection Guide

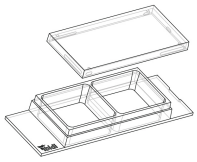
µ–Slide 2 Well	µ–Slide 2 Well Ph+
Standard open wells for maximum sample access. Meniscus disturbs the beam path. Good phase contrast quality only in the center of each well	Special plate in the center of the wells suppresses meniscus formation. No meniscus – parallel beam path. For excellent phase contrast microscopy all over the wells.



Ordering Information

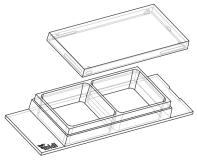
The µ–Slide 2 Well is available as open well and as a Ph+ version, as well as in a glass bottom version. See the table below for choosing your µ–Slide 2 Well.

µ–Slide 2 Well



Cat. No.	Description
80286	**µ–Slide 2 Well ibiTreat**: #1.5 polymer coverslip, tissue culture treated, sterilized
80282	**µ–Slide 2 Well Collagen IV**: #1.5 polymer coverslip, sterilized
80284	**µ–Slide 2 Well Poly-L-Lysine**: #1.5 polymer coverslip, sterilized
80281	**µ–Slide 2 Well Uncoated**: #1.5 polymer coverslip, hydrophobic, sterilized
80287	**µ–Slide 2 Well Glass Bottom**: 1.5H (170 µm ±5 µm) D 263 M Schott glass, sterilized

µ–Slide 2 Well $^{Ph+}$



Cat. No.	Description
80296	**µ–Slide 2 Well $^{Ph+}$ ibiTreat**: #1.5 polymer coverslip, tissue culture treated, sterilized
80292	**µ–Slide 2 Well $^{Ph+}$ Collagen IV**: #1.5 polymer coverslip, sterilized
80294	**µ–Slide 2 Well $^{Ph+}$ Poly-L-Lysine**: #1.5 polymer coverslip, sterilized
80291	**µ–Slide 2 Well $^{Ph+}$ Uncoated**: #1.5 polymer coverslip, hydrophobic, sterilized
80297	**µ–Slide 2 Well $^{Ph+}$ Glass Bottom**: 1.5H (170 µm ±5 µm) D 263 M Schott glass, sterilized

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.