

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 high optical quality of the material is similar to that of glass, so you can perform all kinds of fluorescence experiments with uncompromised resolution and choice of wavelength.

The μ-Slide 18 Well Glass Bottom is a convenient chambered coverslip with 18 wells for cell culture, immunofluorescence, and high-end microscopy.

## Material

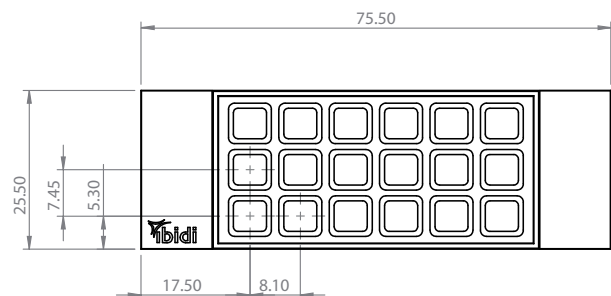
The μ-Slide 18 Well Glass Bottom is made with a glass coverslip bottom. It is not possible to detach the bottom. The μ-Slide 18 Well Glass Bottom is not autoclavable since it is temperature stable only up to 80°C/175°F.

### 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

### Geometry of the μ-Slide 18 Well Glass Bottom

Outer dimensions (w×l)	25.5 × 75.5 mm <sup>2</sup>
Number of wells	18
Dimensions of wells (w×l×h)	5.7 × 6.1 × 6.8 mm <sup>3</sup>
Volume per well	100 μl
Height with/without lid	8.2/6.8 mm
Growth area per well	0.34 cm <sup>2</sup>
Coating area per well	1.15 cm <sup>2</sup>
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	
Glass Bottom	36 months

### 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 of the μ-Slide 18 Well Glass Bottom

The μ-Slide 18 Well Glass Bottom provides standard slide format according to ISO 8037/1.

## Surface

The μ-Slide 18 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

Detailed information about coatings is provided in [Application Note 08: Coating protocols for ibidi labware products](#).

In short, specific coatings are possible following this protocol:

1. Prepare your coating solution according to the manufacturer's specifications or reference.
2. Apply 100 μl and leave at room temperature for at least 30 minutes.
3. Aspirate the solution and wash with the recommended protein dilution buffer.
4. The μ-Slide 18 Well Glass Bottom is ready to be used. Optionally let dry at room temperature. Attention, some coating proteins might degenerate when drying!

## Seeding Cells

- Trypsinize and count cells as usual. Dilute the cell suspension to the desired concentration. Depending on your cell type, application of a  $5-11 \times 10^4$  cells/ml suspension should result in a confluent layer within 2–3 days.
- Apply 100 μl 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<sub>2</sub> 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 100 μl fresh medium per well.

## Chemical Compatibility

The table below provides some basic information on the chemical and solvent compatibility of the μ-Slide 18 Well Glass Bottom. For a full list of compatible solvents and more information on chemical compatibility, please visit the FAQ section on [ibidi.com](http://ibidi.com).

Chemical / Solvent	Compatibility
Methanol	yes
Ethanol	yes
Formaldehyde	yes
Acetone	no
Mineral oil	yes
Silicone oil	yes
Immersion oil	See <b>Immersion Oil</b> on page 2.

## Microscopy

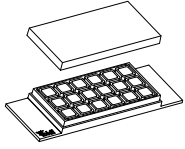
To analyze your cells, no special preparations are necessary. Cells can be directly observed live or fixed, preferably on an inverted microscope. The bottom cannot be removed. For optimal results in fluorescence microscopy and storage of fixed and stained samples, ibidi provides a mounting medium (50001) optimized for μ-Dishes, μ-Slides, and μ-Plates.

## 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.

**Ordering Information**

The μ-Slide 18 Well family is available with different surfaces. See table below for choosing your μ-Slide 18 Well.



Cat. No.	Description
81816	μ-Slide 18 Well ibiTreat: #1.5 polymer coverslip, tissue culture treated, sterilized
81811	μ-Slide 18 Well Uncoated: #1.5 polymer coverslip, hydrophobic, sterilized
81817	μ-Slide 18 Well 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](http://www.ibidi.com). For questions and suggestions please contact us by e-mail [info@ibidi.de](mailto:info@ibidi.de) or by telephone +49 (0)89/520 4617 0. All products are developed and produced in Germany.

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