

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

The glass bottom versions are especially designed for TIRF, super resolution and single molecule applications.

The μ-Slide 1 Well Glass Bottom is an open well chambered coverslip in which cells can be cultivated and, subsequently, investigated with microscopical methods. This open μ-Slide is intended for cell culture, immunofluorescence, live cell imaging, and high-end microscopy.

Overview

This document is applicable to the following product numbers:

Cat. No.	Product Name
82107	μ-Slide 1 Well Glass Bottom: #1.5 (170 μm ±5 μm) D 263 M Schott glass, sterilized, individually packed

Material

The μ-Slide 1 Well Glass Bottom is made with a glass coverslip bottom. It is not possible to detach the bottom. The μ-Slide 1 Well Glass Bottom is intended for one-time use and not autoclavable since it is temperature-stable only up to 80°C/175°F.

Optical Properties of the Glass Coverslip Bottom

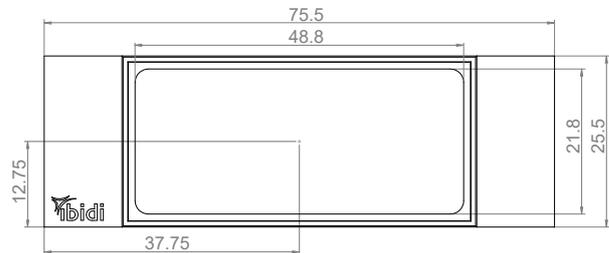
Refractive index n_D	1.523
Abbe number	55
Thickness	No. 1.5H (selected quality 170 μm, ± 5 μm)
Material	Schott borosilicate glass, D 263M

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 of the μ-Slide 1 Well

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



Geometry

Outer dimensions in mm (w × l)	25.5 × 75.5
Number of wells	1
Dimensions of wells in mm (w × l × h)	21.8 × 48.8 × 9.3
Volume per well	3 ml
Height with/without lid	10.8/9.5 mm
Growth area per well	10.6 cm ²
Coating area per well	14.6 cm ²
Bottom	Glass coverslip

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

Surface

The μ-Slide 1 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 3 ml 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 1 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 $5\text{--}11 \times 10^4$ cells/ml suspension should result in a confluent layer within 2–3 days.

- Apply 3 ml cell suspension into each well. 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% CO₂ 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 3 ml fresh medium per well.

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 mounting media (50001 and 50011) 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.

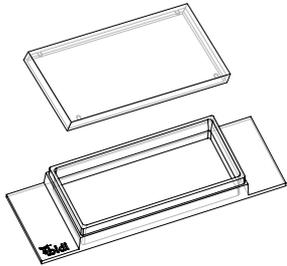
Chemical Compatibility

The following table provides some basic information on the chemical and solvent compatibility of the μ-Slide 1 Well Glass Bottom. For a full list of compatible solvents and more information on chemical compatibility, please visit the FAQ section on ibidi.com.

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

Ordering Information

μ-Slide 1 Well



Cat. No.	Description
82106	μ-Slide 1 Well ibiTreat: #1.5 polymer coverslip, tissue culture treated, sterilized, individually packed
82101	μ-Slide 1 Well Uncoated: #1.5 polymer coverslip, hydrophobic, sterilized, individually packed
82107	μ-Slide 1 Well Glass Bottom: #1.5H (170 μm ±5 μm) D 263 M Schott glass, sterilized, individually packed

For research use only!

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

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