

Instructions µ-Slide 8 Well high Glass Bottom



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 $\mu\text{-Slide 8 Well}^{high}$ Glass Bottom is an 8 well chamber slide in which cells can be cultivated and, subsequently, investigated with microscopical methods. This open $\mu\text{-Slide}$ (chambered coverslip) 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
80807	μ -Slide 8 Well ^{high} Glass Bottom: #1.5H (170 μ m ±5 μ m) D 263 M Schott glass, sterilized, individually packed
80807-90	μ -Slide 8 Well high Glass Bottom: #1.5H (170 μ m ± 5 μ m) D 263 M Schott glass, sterilized, individually packed
80807-96	μ -Slide 8 Well high Glass Bottom: #1.5H (170 μ m ± 5 μ m) D 263 M Schott glass, sterilized, 8 per tray, 12 trays

Material

The μ -Slide 8 Well ^{high} Glass Bottom is made with a glass coverslip bottom. It is not possible to detach the bottom. The μ -Slide 8 Well ^{high} 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

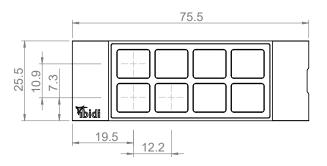
Refractive index n _D	1.523
Abbe number	55
Thickness	No. 1.5H (selected quality 170 μ m, \pm 5 μ m)
Material	Schott borosilicate glass, D 263M

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 8 Well high

The μ -Slide 8 Well ^{high} provides a standard slide format according to ISO 8037/1.



Geometry				
Outer dimensions in mm $(w \times l)$	25.5 × 75.5			
Number of wells	8			
Dimensions of wells in mm $(w \times l \times h)$	$9.4\times10.7\times9.3$			
Volume per well	300 µl			
Height with/without lid	10.8/9.5 mm			
Growth area per well	1.0 cm^2			
Coating area per well	$2.2\mathrm{cm}^2$			
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.



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μ-Slide 8 Well high Glass Bottom

Conditions			
Shipping conditions Storage conditions	Ambient RT (15–25°C)		
Shelf Life			
Glass Bottom	36 months		

Surface

The μ -Slide 8 Well ^{high} 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 $300\,\mu l$ 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 8 Well ^{high} 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�× 10⁴ cells/ml suspension should result in a confluent layer within 2–3 days.
- Apply 300 µl 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 300 µl fresh medium per well.

Tip:

As you may know from 96 well plates, the bent meniscus at the air–liquid interphase in small open wells destroys the phase contrast effect of your microscope image. To avoid this problem, we recommend using our channel Slides such as the μ -Slides I Luer and μ -Slide VI $^{0.4}$ or a Ph+ Slide.

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 8 Well ^{high} 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.

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.

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Ordering Information

μ-Slide 8 Well high



Cat. No.	Description
80806	μ-Slide 8 Well ^{high} ibiTreat: #1.5 polymer coverslip, tissue culture treated, sterilized, individually packed
80806-90	μ-Slide 8 Well ^{high} ibiTreat, Bulk Pack : #1.5 polymer coverslip, tissue culture treated, sterilized, individually packed
80806-96	μ-Slide 8 Well ^{high} ibiTreat, Bulk Pack : #1.5 polymer coverslip, tissue culture treated, sterilized, 8 per tray, 12 trays
80809	μ-Slide 8 Well ^{high} Collagen I: #1.5 polymer coverslip, sterilized, individually packed
80802	μ-Slide 8 Well high Collagen IV : #1.5 polymer coverslip, sterilized, individually packed
80804	μ-Slide 8 Well ^{high} Poly-L-Lysine: #1.5 polymer coverslip, sterilized, individually packed
80801	μ-Slide 8 Well ^{high} Uncoated : #1.5 polymer coverslip, hydrophobic, sterilized, individually packed
80800	μ-Slide 8 Well ^{high} Bioinert : #1.5 polymer coverslip, surface passivation with Bioinert, sterilized, individually packed
80807	μ -Slide 8 Well ^{high} Glass Bottom: #1.5H (170 μ m ±5 μ m) D 263 M Schott glass, sterilized, individually packed
80807-90	μ-Slide 8 Well ^{high} Glass Bottom, Bulk Pack : #1.5H (170 μm ±5 μm) D 263 M Schott glass, sterilized, individually packed
80807-96	μ-Slide 8 Well ^{high} Glass Bottom, Bulk Pack : #1.5H (170 μm ±5 μm) D 263 M Schott glass, sterilized, 8 per tray, 12 trays

μ-Slide 8 Well high Grid-500



Cat. No.	Description
80806-G500	μ-Slide 8 Well high ibiTreat Grid-500 : #1.5 polymer coverslip, tissue culture treated, grid repeat distance 500 μm, 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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