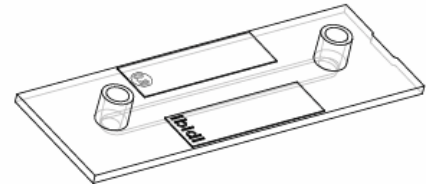
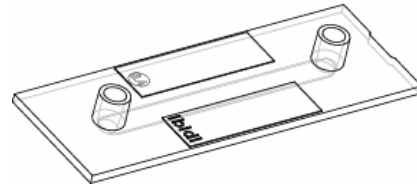
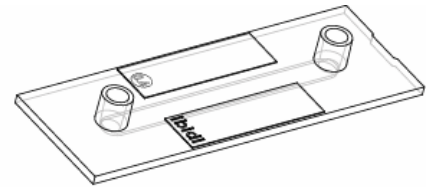
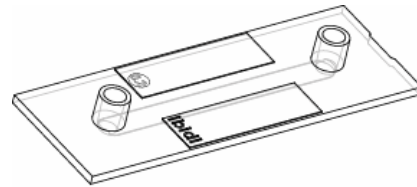
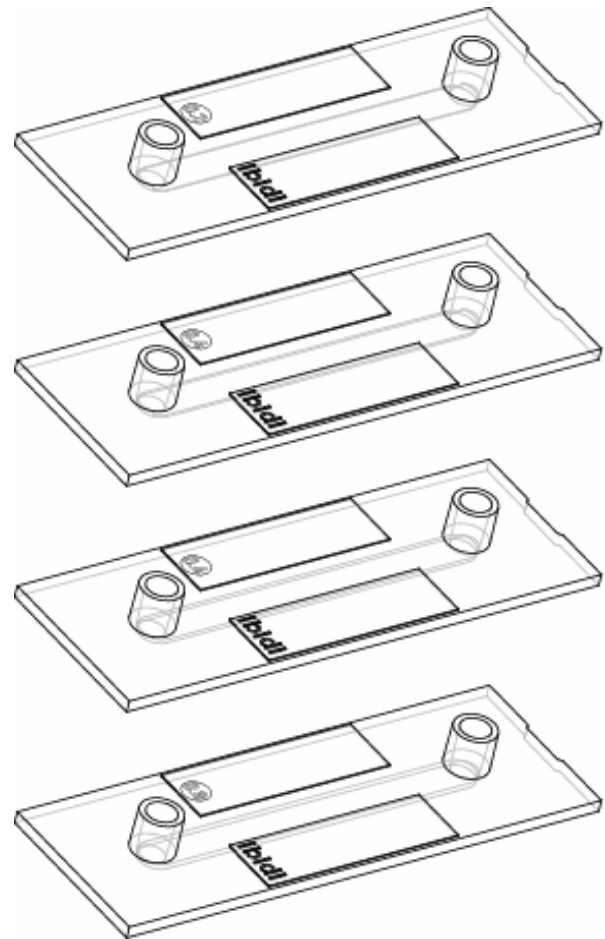


Product information

μ -Slides I Luer



μ -Slide I Luer - versions



▪ μ -Slide I ^{0.2} Luer

Channel height:

0.2 mm (200 μ m)

▪ μ -Slide I ^{0.4} Luer

0.4 mm (400 μ m)

▪ μ -Slide I ^{0.6} Luer

0.6 mm (600 μ m)

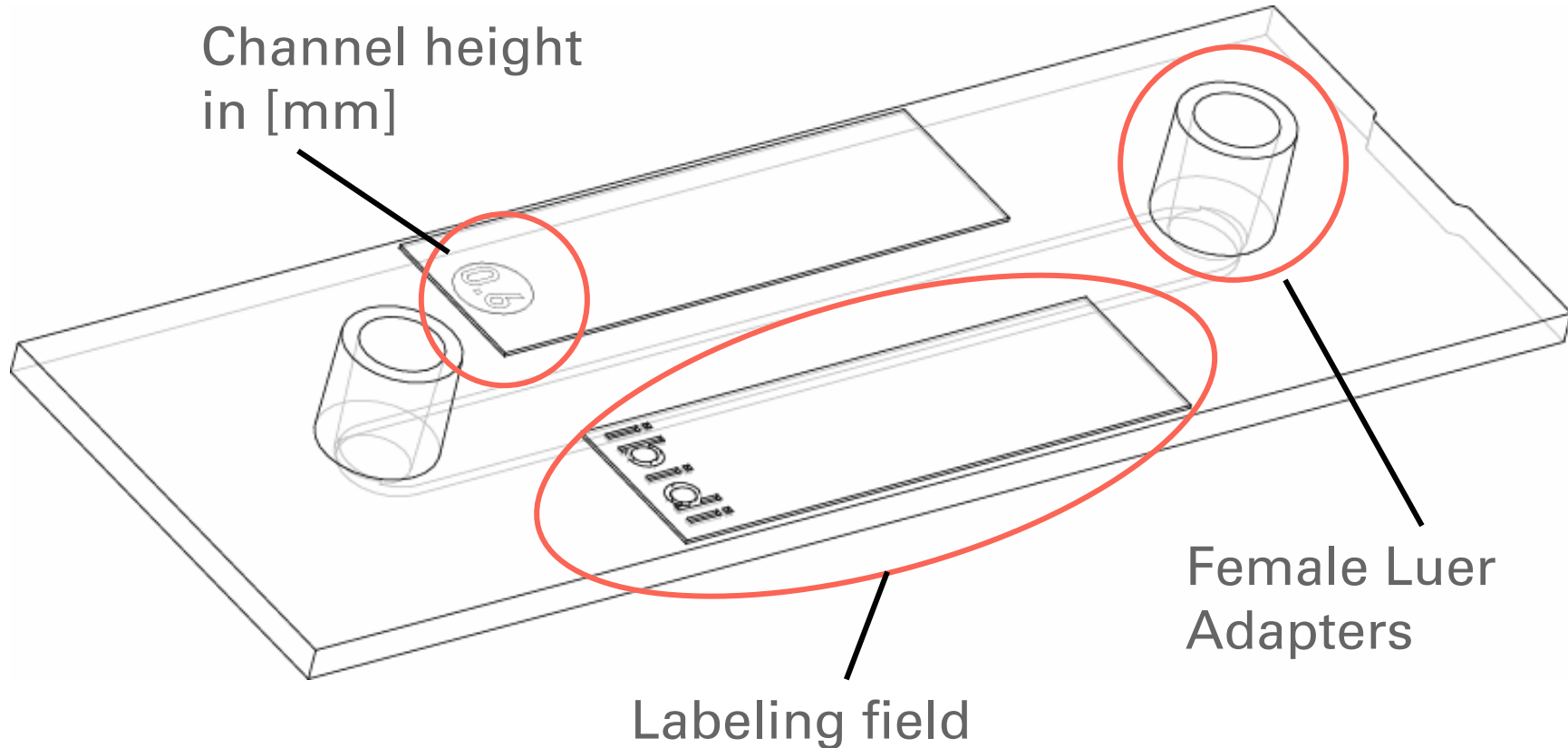
▪ μ -Slide I ^{0.8} Luer

0.8 mm (800 μ m)


Features I

Channel length 50 mm
Channel width 5 mm

Channel height
in [mm]



Easy flow connection by standard Luer adapters

Application Note for detailed information on flow rates, shear stress, and shear rates on [www.!\[\]\(dfbd6b3763a6d1d9afaa974f64e2e4b5_img.jpg\)ibidi.com](http://www.ibidi.com)


Labeling field

Fully compatible with the ibidi pump system

Available as flow kit with tubing and adapters

Channel structure provides excellent optical quality and cell handling

Features III (general features)



Standard format (25.5 mm x 75.5 mm)

ibiTreat (tissue culture treated) and protein coatings for excellent cell growth

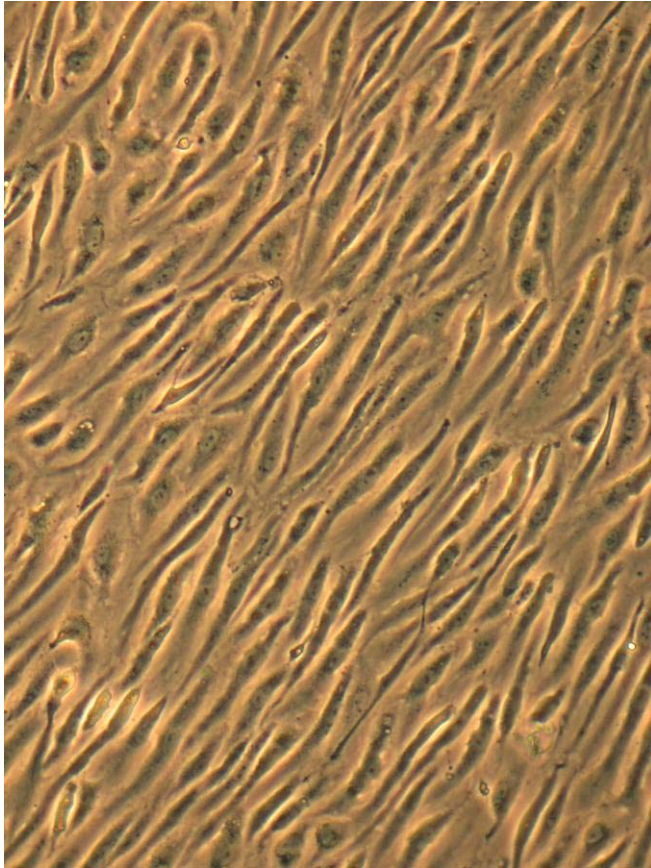
No glue – biocompatible plastic

High quality plastic bottom (coverslip-like #1.5)

Thin bottom for low or high magnification microscopy (up to 100x)

Low auto fluorescence (like glass)

Compatible with solvents for staining and fixation



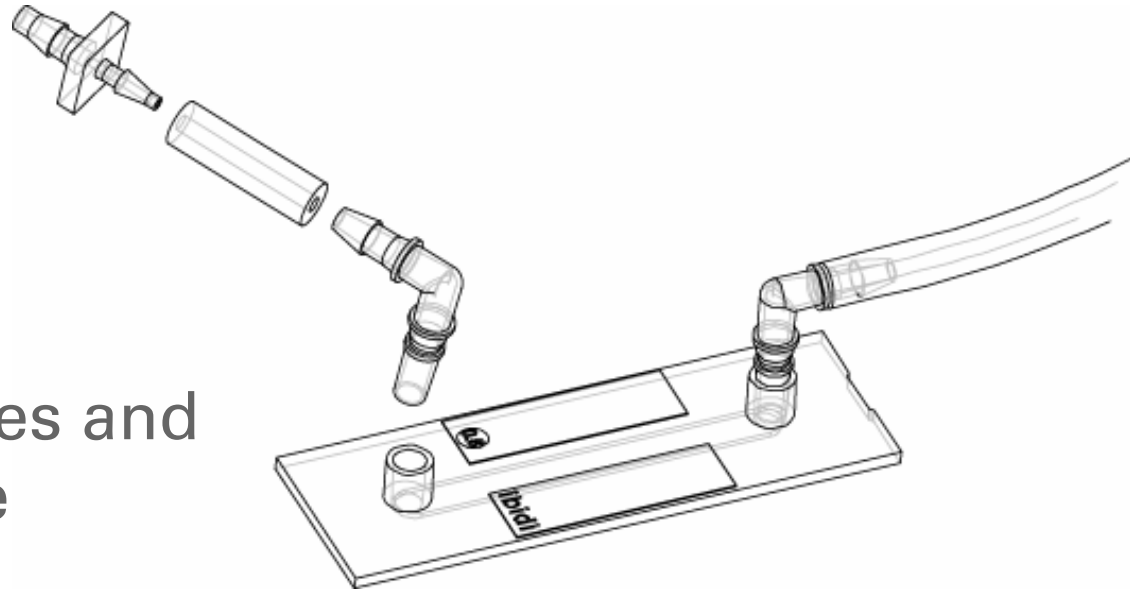
Aligned endothelial cells (HUVEC) cultured under flow conditions (Phase contrast, 10x)

ibiTreat (TC-treated) for great cell growth

Uncoated surface for suspension cells or customer specific coatings

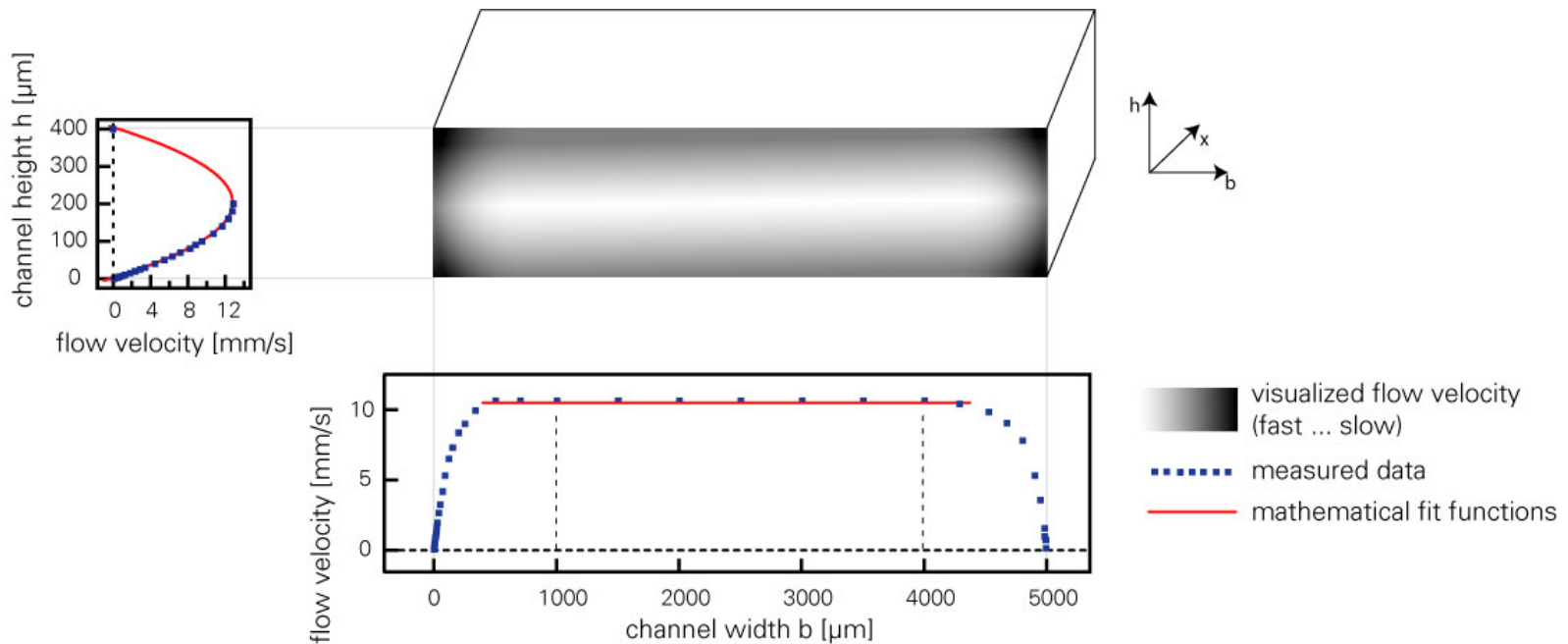
Precoated slides (Collagen IV, Fibronectin, Poly-L-Lysine) also available.

- Flow kits with tubes and adapters available
- For all kinds of pumps
- Easy connection via Luer adapters

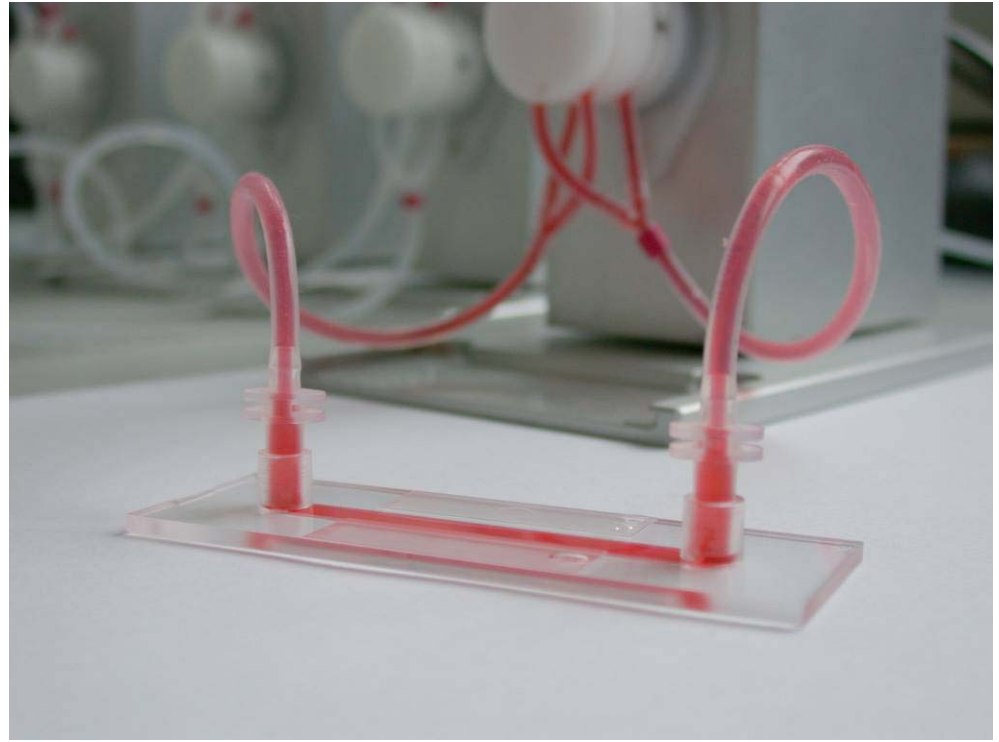
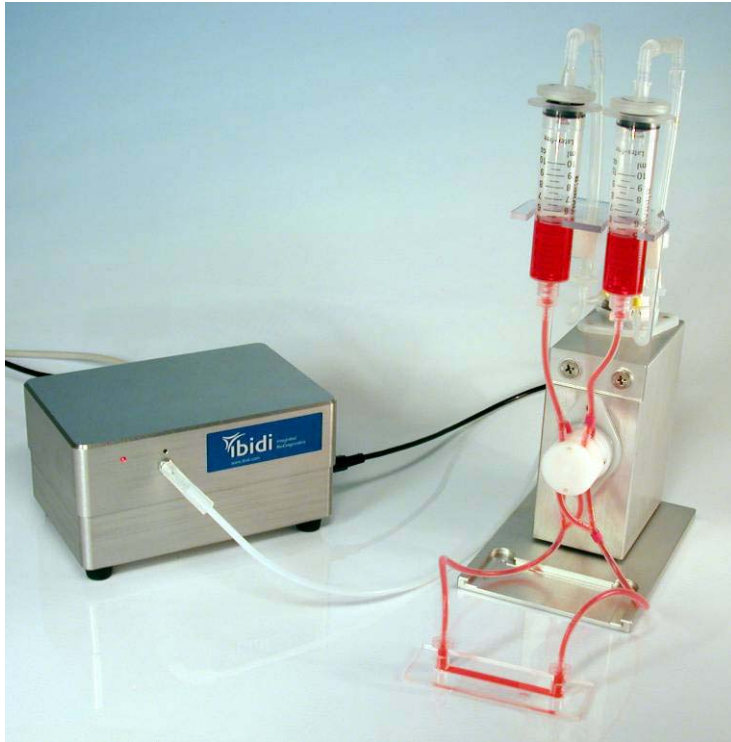


Flow applications II

- Large area of uniform shear stress
- Detailed flow calculations on www.ibidi.com
- No turbulent flow – Always laminar conditions



Compatible with ibidi pump system



100 % compatible and ready-to-use!

Choosing the right channel for flow applications



For flow assays with small amounts of medium and high values of shear stress, the 0.2 mm channel is recommended.

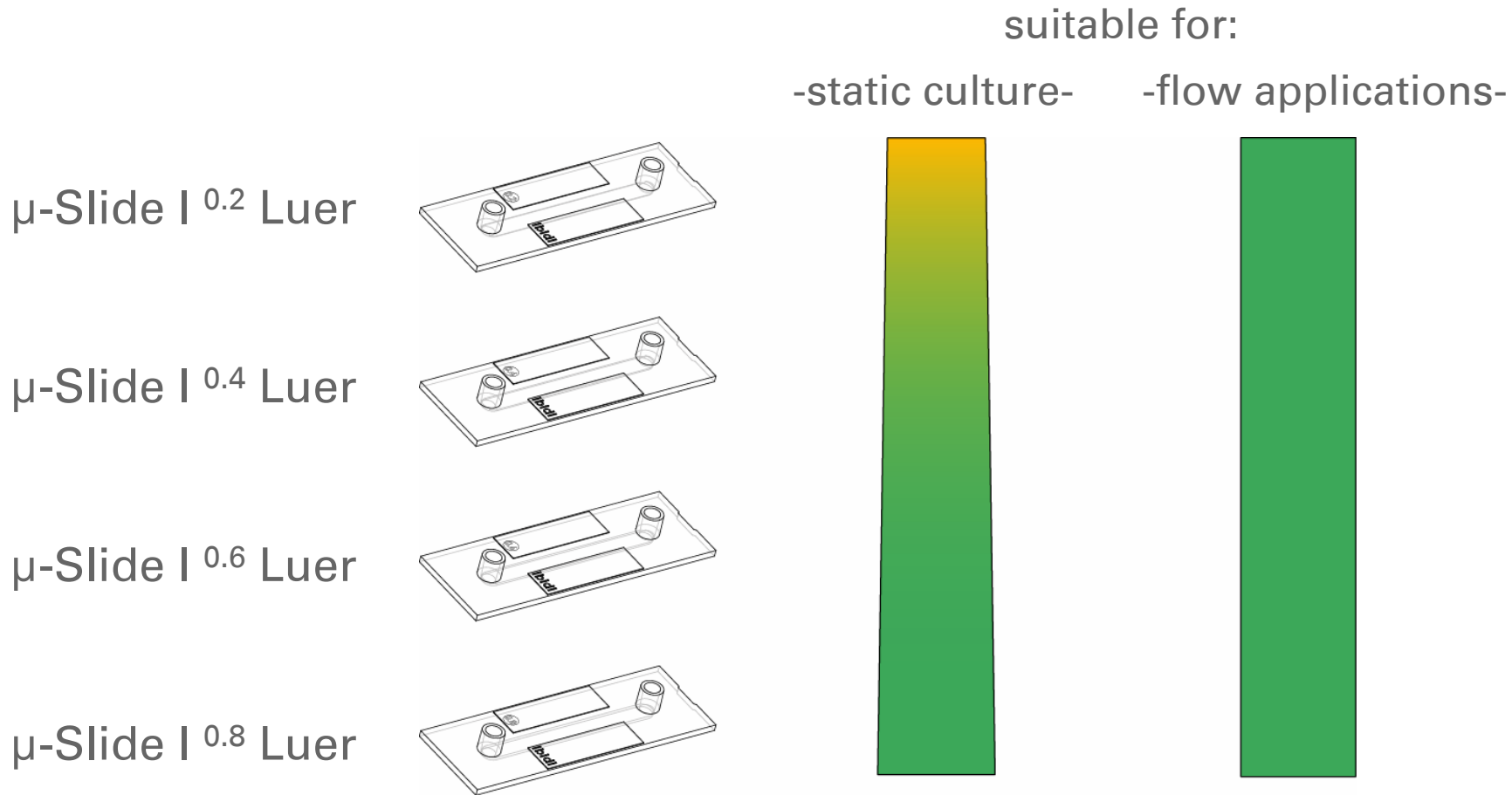
For a wide range of shear stress the 0.4 mm channel is recommended.

For controlling low values of shear stress (<2 dyne /cm²) 0.6 and 0.8 mm channels are best suited.

Comparison (example flow rate of 0.8 ml/min)

Channel height [mm]	Shear stress [dyne/cm ²]	Shear rate [1/sec]	Channel volume [μl]
0.2	$2^2 = 4$	$2^2 \times 100 = 400$	$1/2 \times 100 = 50$
0.4	1	100	100
0.6	$(2/3)^2 = 0.44$	$(2/3)^2 \times 100 = 44$	$3/2 \times 100 = 150$
0.8	$(1/2)^2 = 0.25$	$(1/2)^2 \times 100 = 25$	$2 \times 100 = 200$

Static culture vs. flow applications



Low channels are more suitable for **flow applications**.
High channels are more suitable for **static cell culture**.

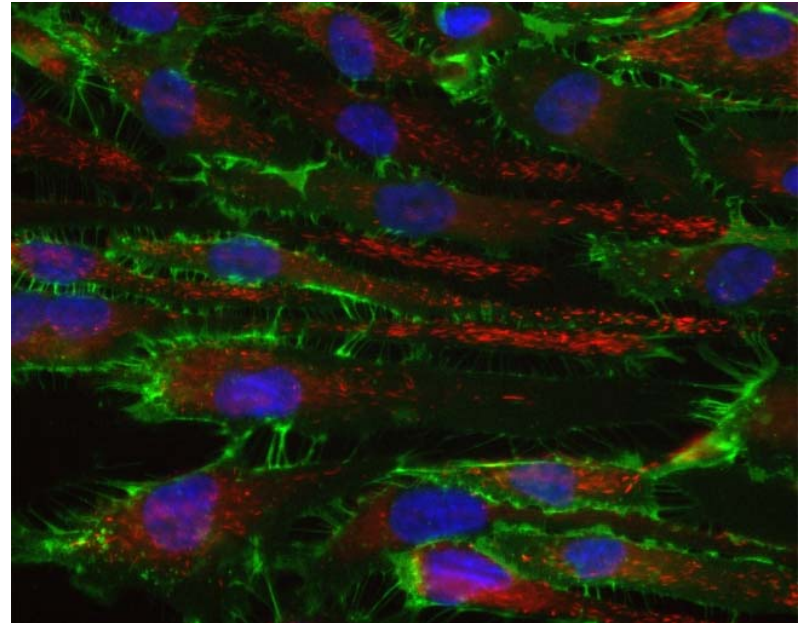
- Coverslip-like bottom (#1.5) for high resolution microscopy
- Compatible with immunofluorescence stainings and fixation
- Compatible with all wavelengths from UV to IR (280 – 900 nm)
- No autofluorescence
- Excellent phase contrast

Endothelial cells (HUVEC) cultured
under flow conditions

Blue: nucleus (DAPI)

Green: CD31 (Alexa488)

Red: Von Willebrand Factor (Cy5)

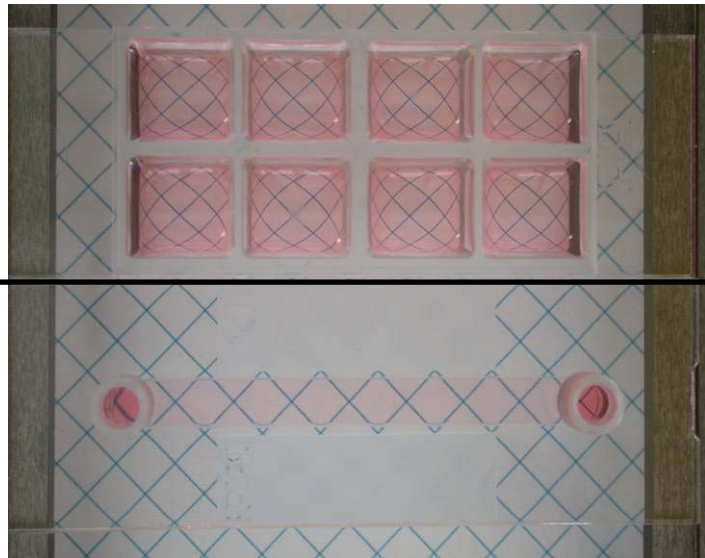


Channel advantages μ -Slide 8 well vs. μ -Slide I Luer

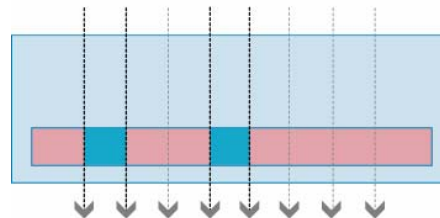
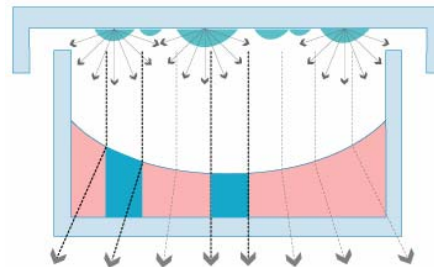
Channel structure provides:

- Defined optical pathway

Image distortion

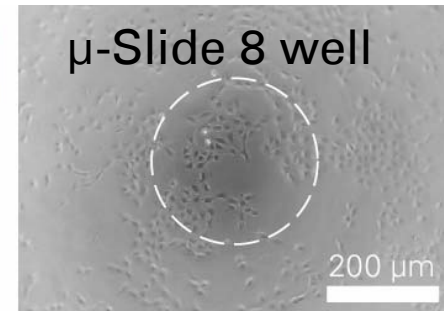


Optical pathway

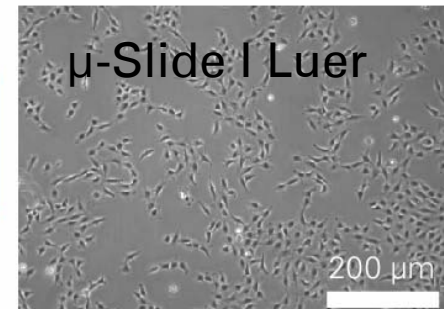


Phase contrast

μ -Slide 8 well



μ -Slide I Luer



Channel advantages μ -Slide 8 well vs. μ -Slide I Luer

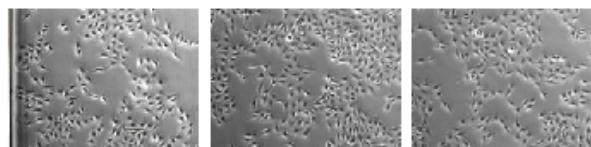
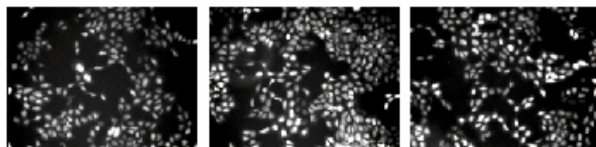
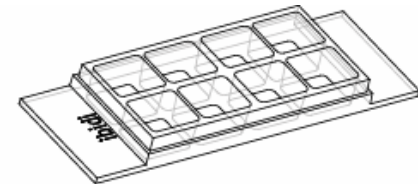
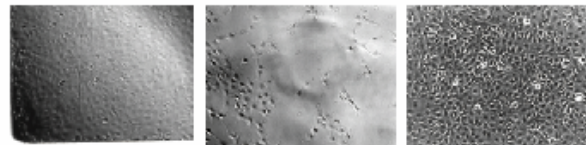
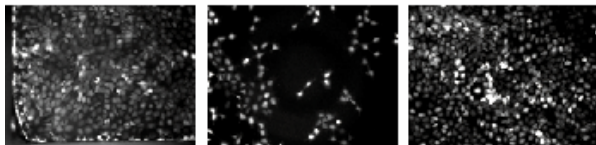
Channel structure provides:

- Homogeneous cell distribution

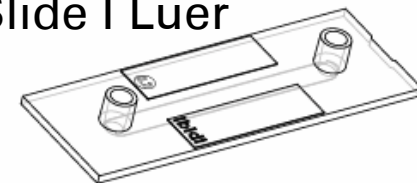
Fluorescence

Phase contrast

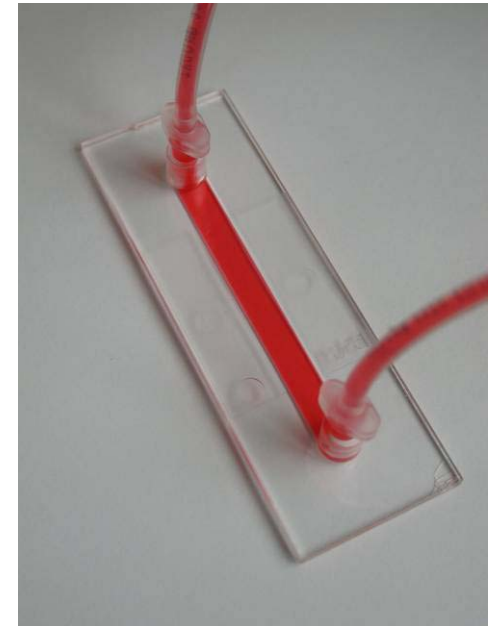
μ -Slide 8 well



μ -Slide I Luer



- Adherent cells under flow conditions
- Cell culture (static or stop-flow)
- Suspension cells
- 3D cell cultures in gels brought into the channel
- Fast reagent changes



Free sample program



Get free samples on:

www..ibidi.com

