DATASHEET

Single-Cell Capture Microfluidic Chip, PDMS/Glass, Hydrodynamic Trapping, 10-25µm Cells, Plasma-Bonded, with PTFE Tubing Kit, 40x15mm, for Cell Research (RUO)

Hydrodynamic single-cell capture chip with 10 µm and 20 µm flow channels, 25 µm channel height fits 10–25 µm cells. Biocompatible PDMS/glass with gas permeability for live-cell research and high-resolution fluorescence imaging (RUO).

APPLICATION

Microfluidics & Life Science

KEY SPECS

- Material: RTV615 PDMS / Borosilicate Glass (Biocompatible)
- Trap Mechanism: Hydrodynamic Trapping
- Flow Channel Width: 10 / 20 µm
- Channel Height: 25 µm

1. Specifications

Material	RTV615 PDMS / Borosilicate Glass (Biocompatible)
Trap Mechanism	Hydrodynamic Trapping
Flow Channel Width	10 / 20 µm
Channel Height	25 µm
Target Cell Diameter	10–25 µm
Chip Format	40 × 15 mm
Substrate Thickness	1 mm
Port Size	0.7 (22-gauge compatible) mm
Bonding	Oxygen Plasma (Permanent)
Operating Pressure	≤ 0.2 MPa
Gas Permeability	PDMS (O_2 / CO_2)

2. Product Details

The Single-Cell Capture Microfluidic Chip uses precision microstructures with 20 µm and 10 µm flow channels to hydrodynamically trap individual cells for research. The 25 µm channel height accommodates 10–25 µm cell diameters, enabling single-cell isolation for genomics and cell-response research. RTV615 PDMS offers gas permeability for live-cell experiments, while the glass substrate supports high-resolution fluorescence microscopy. The compact 40×15 mm format uses an optimized trap geometry for high single-cell occupancy. The ready-to-use kit includes PTFE tubing for cell loading and perfusion. Ideal for circulating-cell capture, single-cell genomics and stem-cell research. **For research use only (RUO). Not for use in diagnostic or therapeutic procedures.**

In stock at Amazon warehouse, ship same day:https://www.amazon.com/dp/B0H6DZQDPM

3. Order / Quote

Model	Pack Size	Availability
LC-SCC-H0001	1× PDMS/glass chip (40×15 mm), 1× PTFE tubing set (cell-loading + perfusion lines), 2× blunt needle tips, 1× syringe, 1× sealed ESD bag with RUO label	In stock (Amazon / US warehouse)

Current pricing and ordering: labcorematerials.com/products/single-cell-capture-microfluidic-chip/

4. Shipping & Compliance

- Ships as empty, sterile-packaged microfluidic hardware. No cells, no media. Not classified as dangerous goods.

Contact

business@labcorematerials.com

www.labcorematerials.com/products/single-cell-capture-microfluidic-chip/