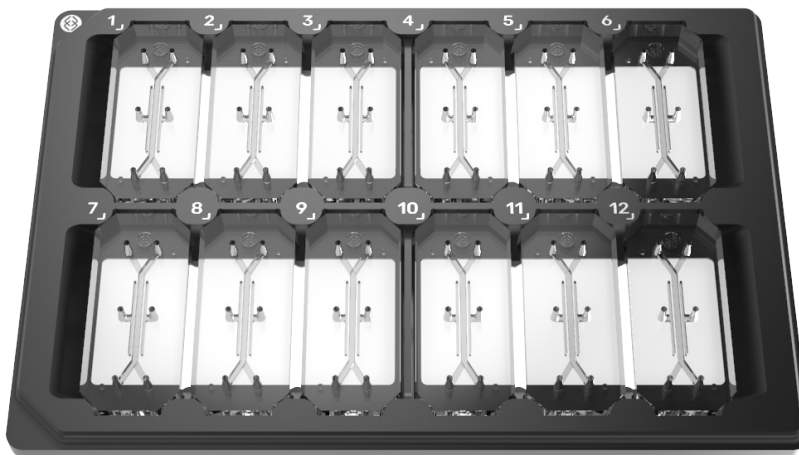




emulate



User Guide: Fixed Chip Imaging Adapter

November 2019

EP206 v1.0

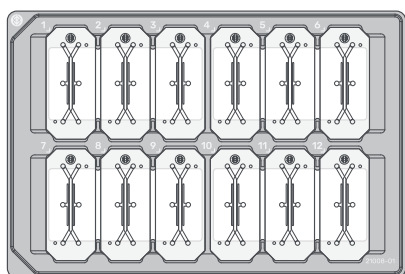
Introduction

The purpose of the Fixed Chip Imaging Adapter is to organize fixed Organ-Chips in a standard SBS footprint for high-throughput imaging. This guide covers three configuration options to limit evaporation, depending on the duration of the imaging session.

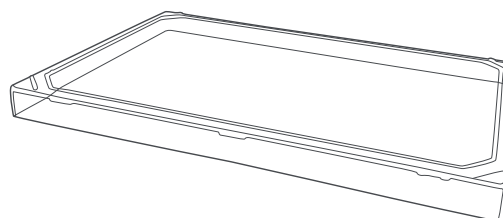
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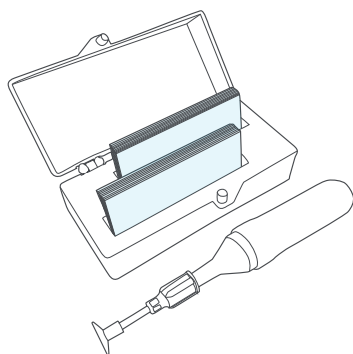
What's in the Fixed Imaging Adapter Kit



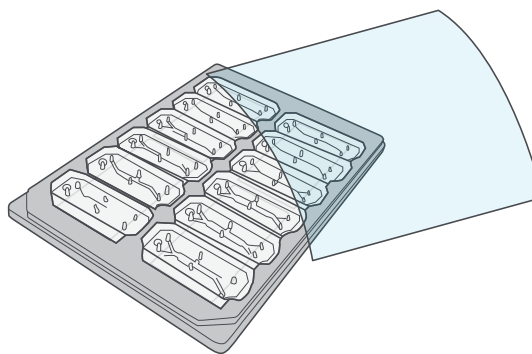
1 Chip Imaging Adapter
(holds up to 12 chips)



5 Universal Clear Lids



60 Glass Coverslips (50 x 24mm),
100 Plastic Coverslips (50 x 24mm),
& 1 Pick-up Tool



5 Sealing Films

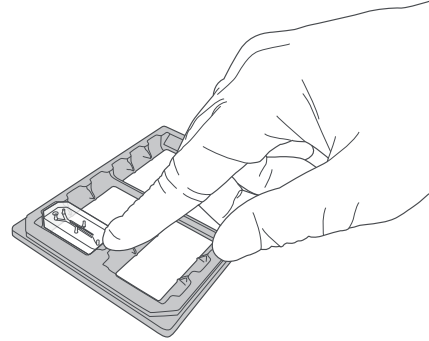
Configuration 01: Lid Only

Chip channels stay hydrated for 45 to 80 minutes

1 Place Chips

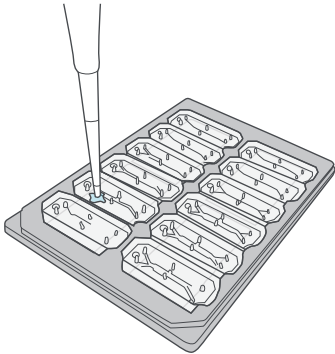


Place chip in one end at a time.



Gently press down around edges of chip to ensure the chip is level.

2 Aspirate Excess PBS



Aspirate any excess PBS from the top surface of all chips.

3 Place Lid



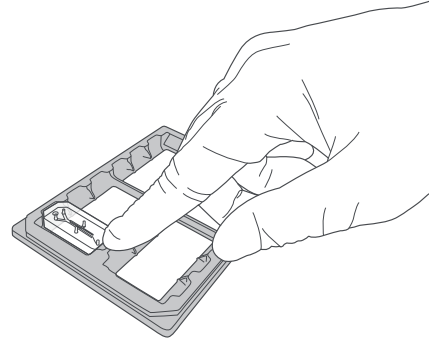
Configuration 02: Sealing Film Only

Chip channels stay hydrated for 4 to 6 hours

1 Place Chips

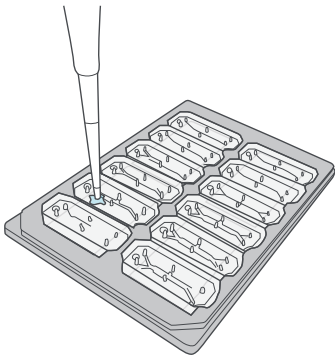


Place chip in one end at a time.

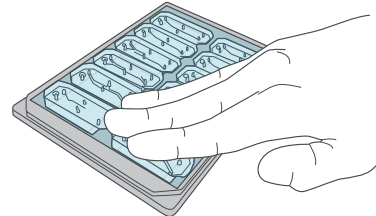


Gently press down around edges of chip to ensure the chip is level.

2 Aspirate + Apply Sealing Film



Aspirate any excess PBS from the top surface of all chips.



Apply sealing film. Compress sealing film against chips by pressing down with fingers or using a roller.

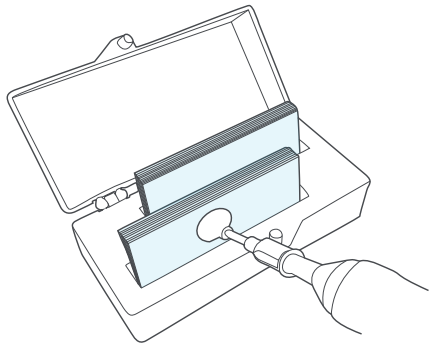
3 Place Lid



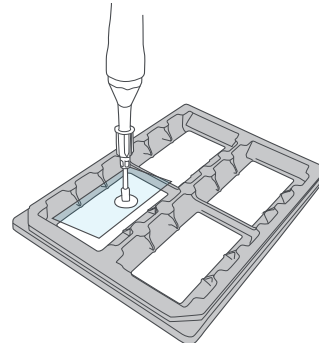
Configuration 03: Sealing Film + Coverslips

Chip channels stay hydrated for 12 to 48 hours

1 Place Coverslips



Use Coverslip Pick-up Tool to pick coverslip from package.

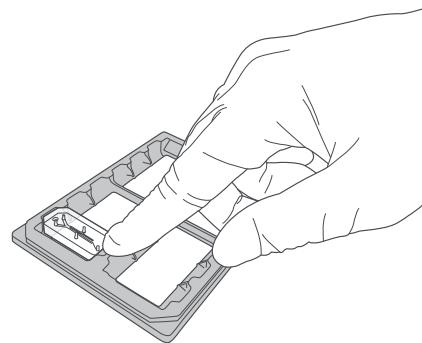


Use Pick-up Tool to place coverslip in Fixed Chip Imaging Adapter.

2 Place Chips

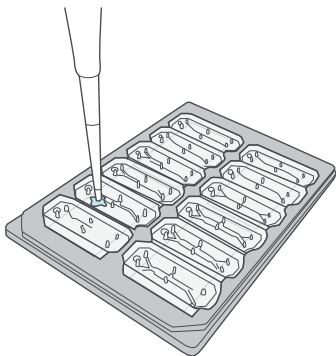


Place chip in one end at a time.

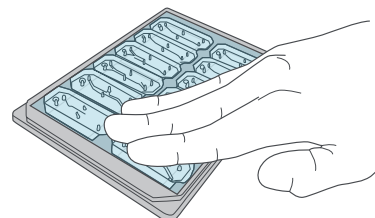


Gently press down around edges of chip to ensure the chip is level.

3 Aspirate + Apply Sealing Film

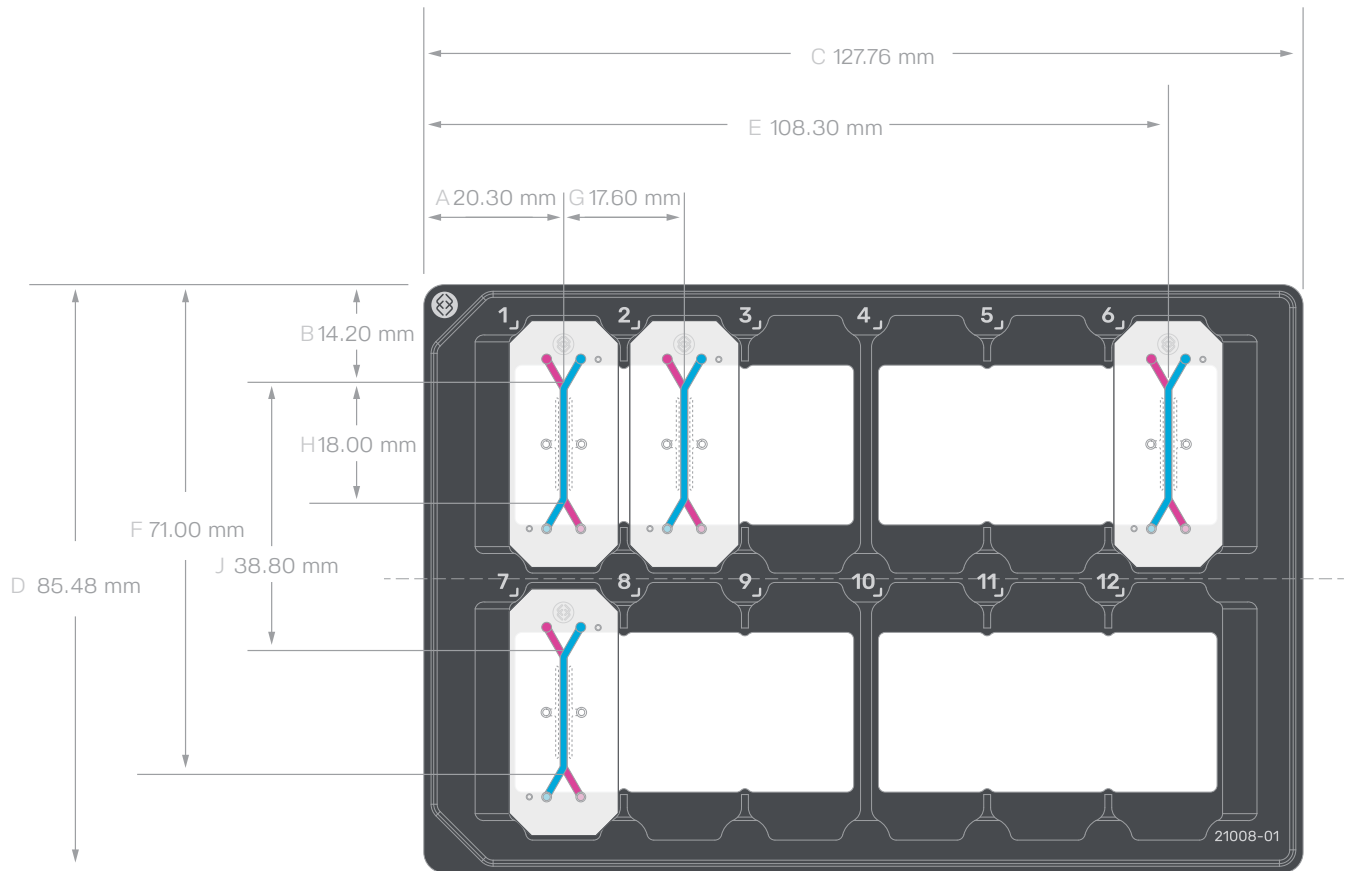


Aspirate any excess PBS from the top surface of all chips.



Apply sealing film. Compress sealing film against chips by pressing down with fingers or using a roller.

Chip Zero-Reference Points



A 20.30 mm

B 14.20 mm

C 127.76 mm

D 85.48 mm

E 108.30 mm

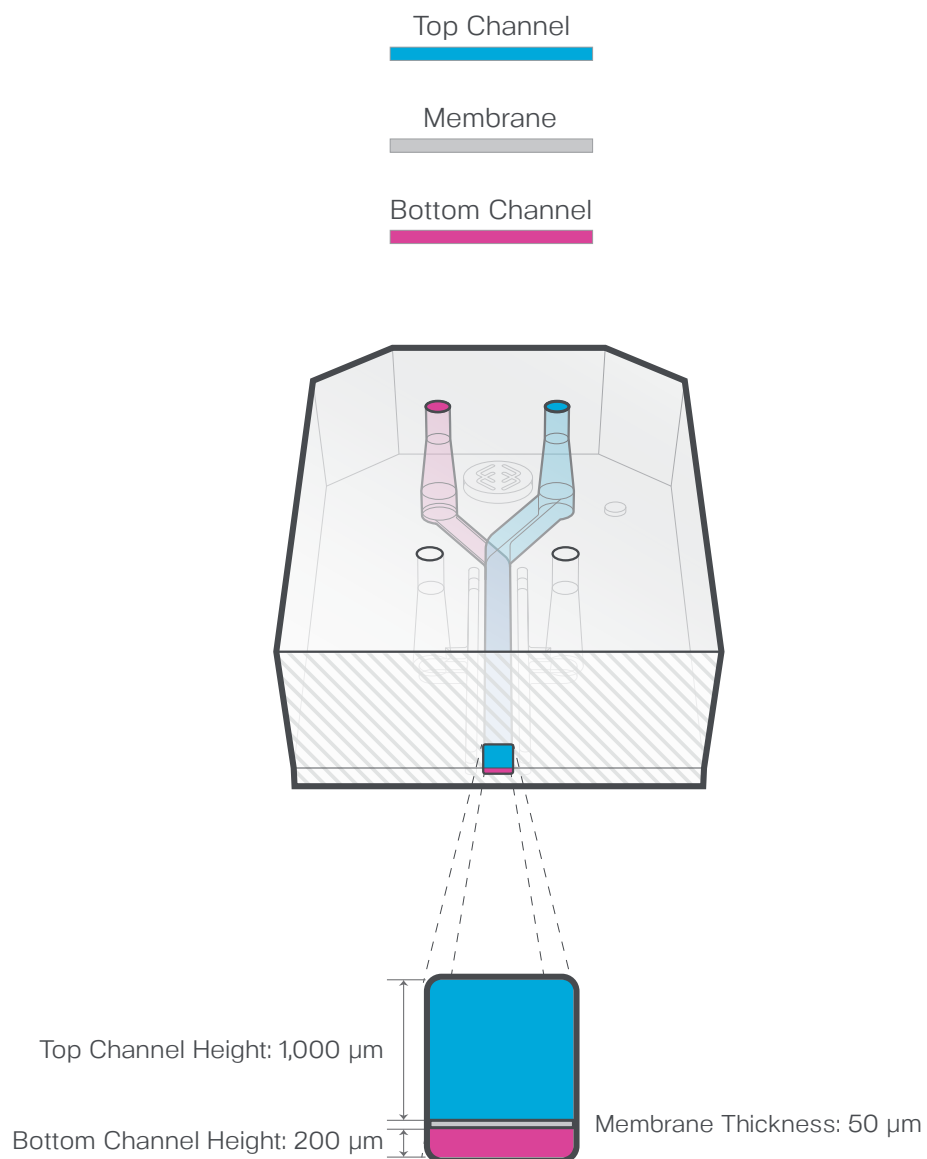
F 71.00 mm

G 17.60 mm (distance between chip zero-reference points)

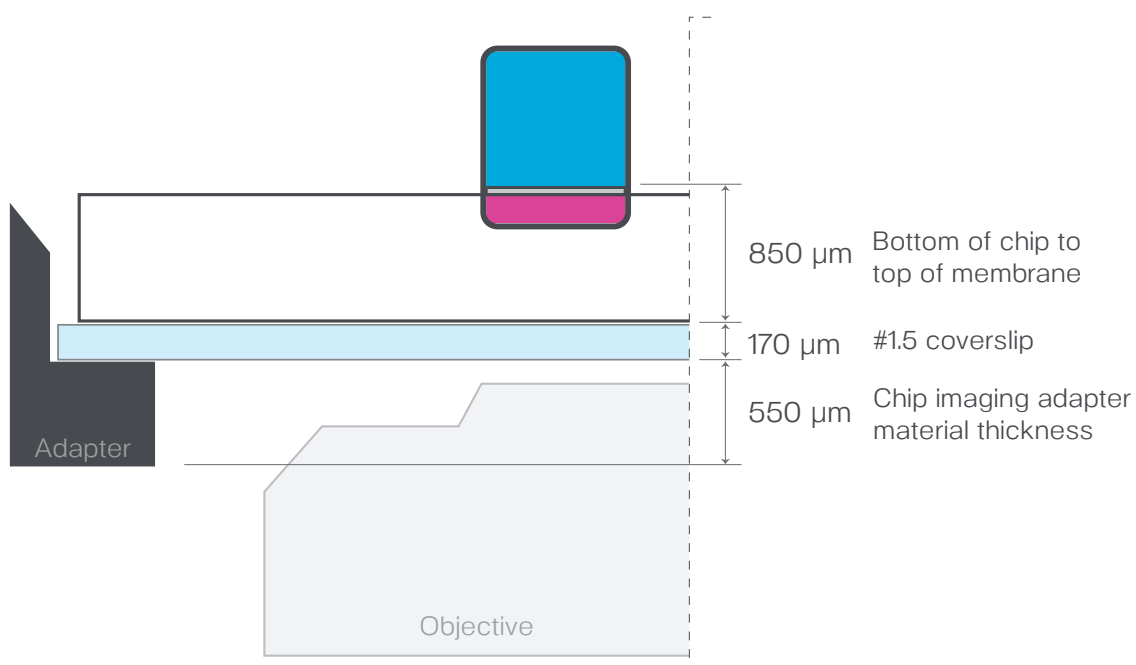
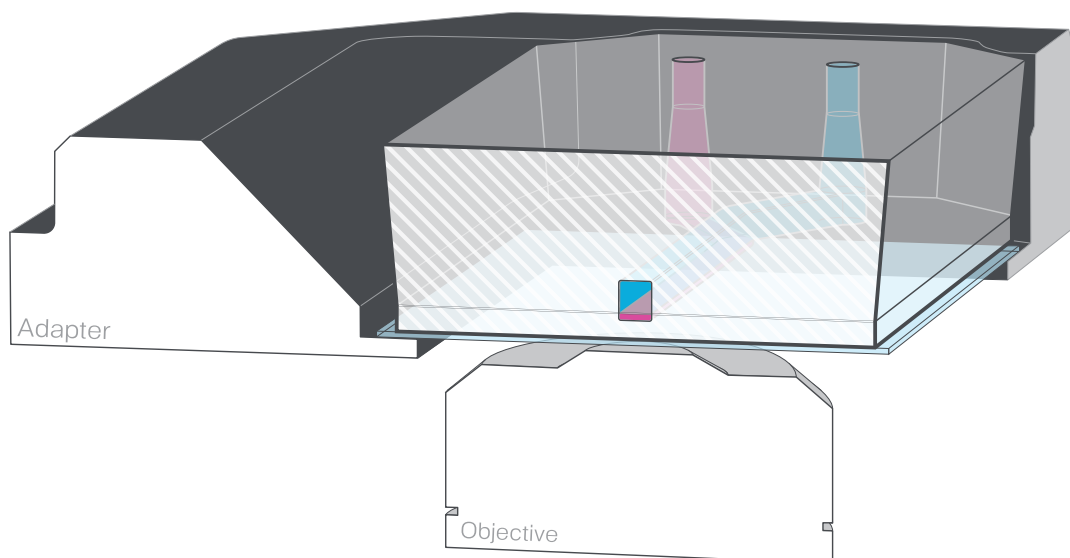
H 18.00 mm (chip channel length)

J 38.80 mm (distance between chip zero-reference points)

Organ-Chip Channels

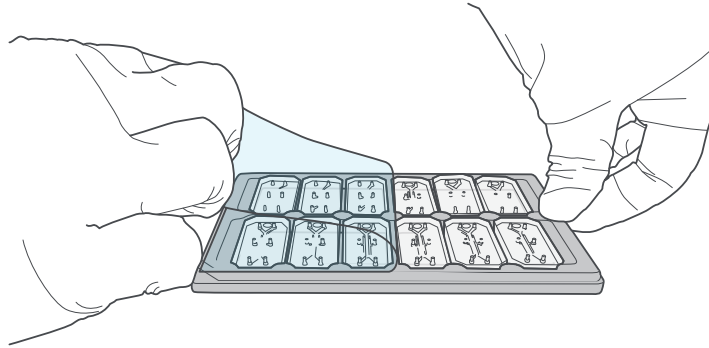


Z-Direction Working Distances



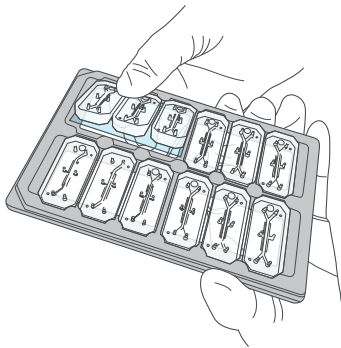
Post Imaging

Remove Sealing Film

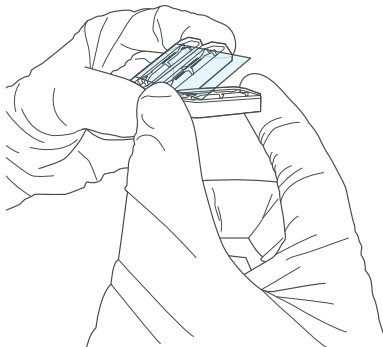


Slowly peel sealing film off at a low angle and the sealing film will release from the top surface of the chips.

Remove Chips with Coverslip

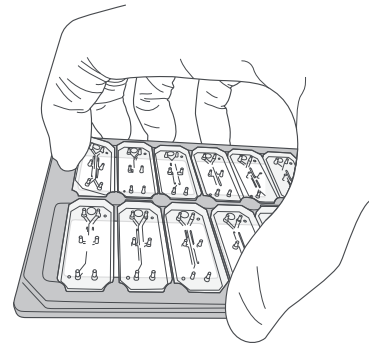


Use index finger on glass side and thumb on chip side to push out coverslip with three chips together.



Gently peel chips, one at a time, from coverslip.

Remove Chips



If coverslips were not used, then simply press against long side of chip and pick out of Fixed Chip Imaging Adapter.

Replenishment Ordering Information

24 x 50 #1.5 (0.17 mm) Cover Glass:

Product number: 260422

tedpella.com

24 x 50 x 0.28 mm Plastic Coverslip:

Product number: 72261-50

emsdiasum.com

Universal Microplate Lids:

Part number: L3411

sigmaaldrich.com

Handi-Vac Coverslip Pick-up Tool

Product number: 528-99

tedpella.com



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