

Before Starting - IMPORTANT

⚠ The content of plastic vials is sterile, open in an aseptic environment! If opened elsewhere, spray with 70% ethanol and dry in a biosafety cabinet. Individual packaging must be opened under sterile conditions.

🔍 **Before opening the individual plastic packaging**, inspect each device for any glass damage. If the glass bottom was damaged during shipping, cracks will be visible through the packaging. If you notice any cracks, please send a photo of the damaged device in its **unopened** plastic sleeve, along with your order number, to info@enuvio.com. We will be happy to quickly send you a replacement device.

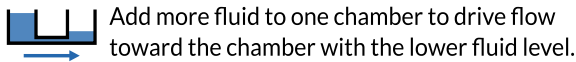
Note: We cannot replace devices that have been removed from their individual packaging.

STORAGE & SELF-LIFE

- Store at room temperature
- Protect from sunlight/UV-exposure
- Use the device within 6 months of receipt

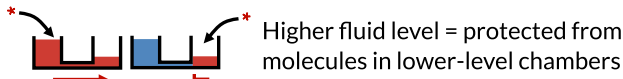


ASYMMETRIC VOLUME LOADING (AVL)



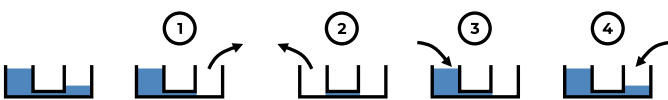
WHEN TO USE AVL

- Surface coating inside microchannels
- Fixation and staining procedures
- Chamber isolation

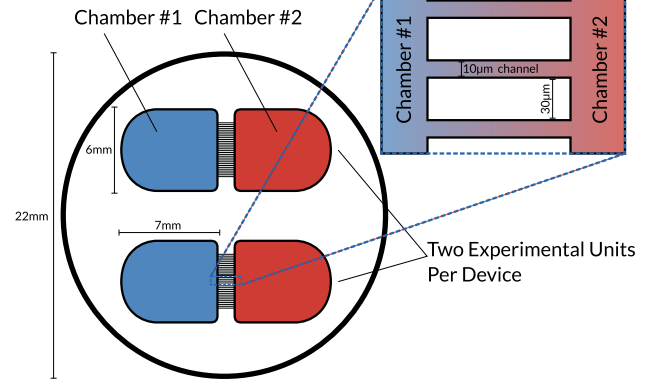


MEDIA EXCHANGES

- 1) Remove media from the chamber with the **lower** fluid level
- 2) Remove media from the chamber with the **higher** fluid level
- 3) Add fresh media to the chamber with the **higher** fluid level
- 4) Add fresh media to the chamber with the **lower** fluid level



Top View



SPECIFICATIONS

1 Device = 2 Experiments

- Chamber working volume: 40 - 150 µL
- Chamber surface area: ~0.35 cm²
- Suggested Seeding density: 40 000 - 50 000 cells per chamber (optimize as needed for your cells)
- Glass coverslip diameter: 22 mm
- Glass coverslip thickness: 0.16 mm - 0.19 mm (#1.5)
- Microchannel number per interface: 70
- Microchannel length: ~640 µm
- Microchannel width: ~10 µm
- Covalently bonded to glass coverslip
- Shipped sterile in PBS

COATING TIP

For coatings that polymerize at room temperature (e.g. Laminin, Geltrex[®] or Matrigel[®]), keep solutions and devices cold (4°C) to ensure even coating.

❄️ Add **cold coating solution** to a **pre-chilled device** using asymmetric volume loading.

🕒 ^{4°C} _{o/n} Incubate at 4°C overnight (12–16 hrs).

🕒 ^{37°C} _{1h} Before seeding cells, incubate the cold device at 37°C for 1 hour to allow the coating to polymerize, then remove all fluids and seed cells according to the protocol.

PRODUCT OPTIONS & WHAT'S INCLUDED

OMEGA ⁴ Kit Options	OMEGA ⁴ Devices (4)	Evaporation Minimizers (4) (reusable)	35mm Dishes (4)	Microscopy Adapter (1) (reusable)
Starter Kit (#eN-o4-001)	✓	✓	✓	✓
Refill Kit (#eN-o4-002)	✓	✓	✓	
Refill Plus Kit (#eN-o4-003)	✓	✓	✓	

📄 **Need More Details?**

Find the latest, complete User Guide for in-depth instructions: enuvio.com/user-guides/

🔍 **Looking for More?**

Discover our next-generation cell culture devices: enuvio.com

✉ **Get Support**

For technical support or questions, please contact us: info@enuvio.com