



emulate

Protocol for Emulate Organ-Chips:

Effluent Sampling

March 28, 2019

EP124 v1.0

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Goals:	Key Steps:	Other Required Materials:
Sample effluent from Emulate Organ-Chips via Pod™ reservoirs	<ul style="list-style-type: none"> Collect effluent 	<ul style="list-style-type: none"> Eppendorf Tubes® or multi-well plate Pipettes or multi-channel pipettes and respective sterile tips Ice bucket and ice

1. Method

- Label Eppendorf tubes or prepare a platemap for multi-well plates (e.g., a 96-well plate) to keep record of samples.
- Depending on your experimental requirements, you can use either a single channel pipette to collect effluent from one reservoir at a time, or a standard multi-channel pipette to collect effluent and media from all four reservoirs simultaneously. Your pipette choice should match the size of the sample collected.
 - Single channel pipette: collect effluent from Pod outlet reservoir, avoiding direct contact with the reservoir vias (illustrated in Fig. 1) and store in pre-labeled Eppendorf tubes or appropriate multi-well plate. Change tips between sampling to avoid cross-contamination.
 - Multi-channel pipette: effluent from all four reservoirs can be simultaneously collected using four pipette tips at once, placing them into the Pod such that one tip is in each reservoir as depicted in Fig. 2. Dispense collected effluents in appropriate multi-well plate. Change tips between sampling each Pod to avoid cross-contamination.
- Immediately place the Eppendorf tubes or multi-well plates on ice (if required).
- Samples can be analyzed immediately or stored at the appropriate temperature required for sample fidelity.

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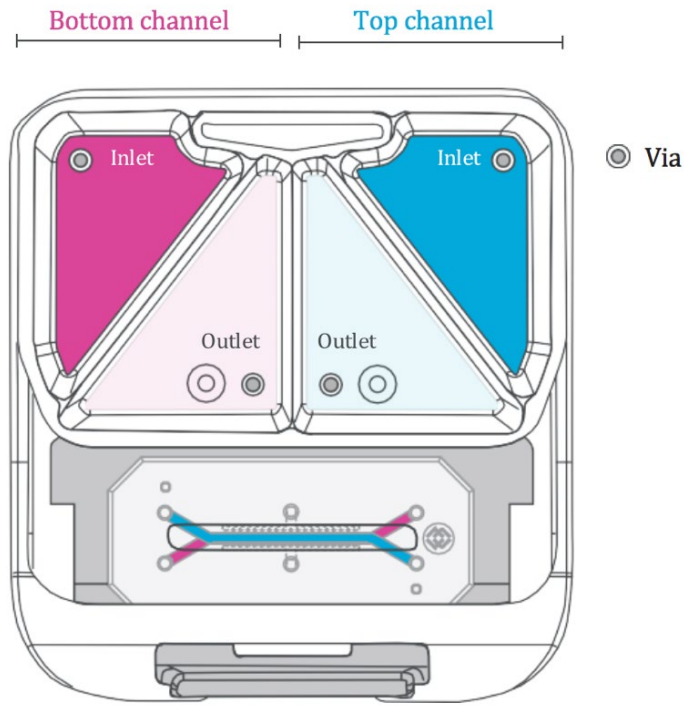


Figure 1: Schematic of Pod with reservoirs and via locations

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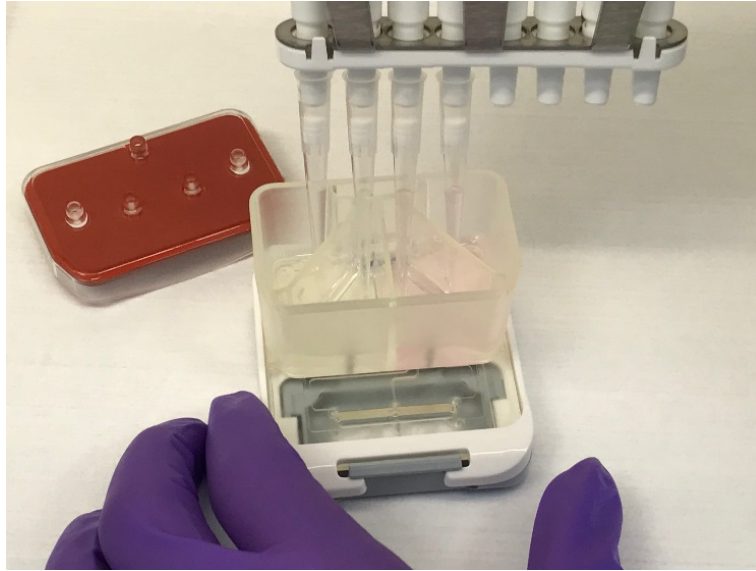


Figure 2: Demonstration of the use of a P200 multi-channel pipette with a Pod with one tip in each reservoir

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