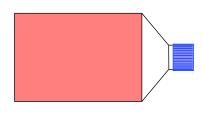
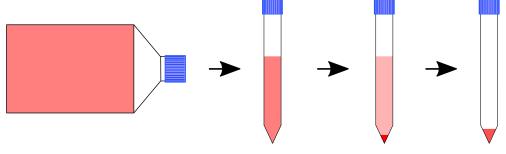
## Figure 1

Stimulate hiPSC-ECs with TNFa (10 ng/mL) in EC-SFM FULL overnight



B Wash the cells with PBS. Add 4 mL per flask of dissociation enzyme and incubate for 5 min at RT

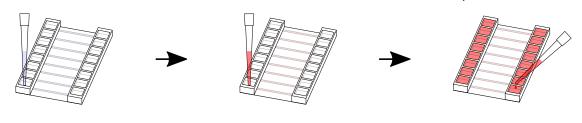
Dilute the enzyme with 8 mL per flask of EC-SFM. Collect the cells in 15 mL conical tube. Centrifuge the cells at 300 x g for 3 min at RT. Resuspend the cell pellet in EC-SFM FULL to make a  $\sim 1.5 \times 10^4$  cells/µL suspension



Coat the chip with human recombinant fibronectin (50 µg/mL) and incubate overnight at +4 °C

Inject 6 µL of hiPSC-ECs suspension (1.5 x 10<sup>4</sup> cells/µL) and incubate for 15 min at +37 °C

Add 40 µL of EC-SFM FULL into reservoirs at both ends of each channel and incubate for 1h at +37 °C. Add 50 µL more after 1 h.



Wash leukocytes with Stain leukocytes with PBS and centrifuge at 300 x q for 3 min at RT

DiOC6 (1 µM) in PBS for 10 min at RT in the dark

at 300 x q for 3 min at RT

Wash leukocytes with Resuspend leukocytes PBS and centrifuge in RPM1 medium at the end concentration  $2.5 \times 10^6 \text{ cells/mL}$ 

