

# **Non-swelling Hydrogel-based Microfluidic Chips**

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# Figure S1

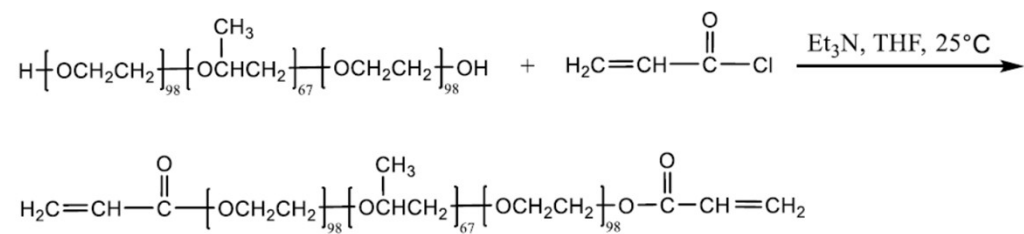


Figure S1 Synthesis procedure for di-acrylated F127.

## Figure S2

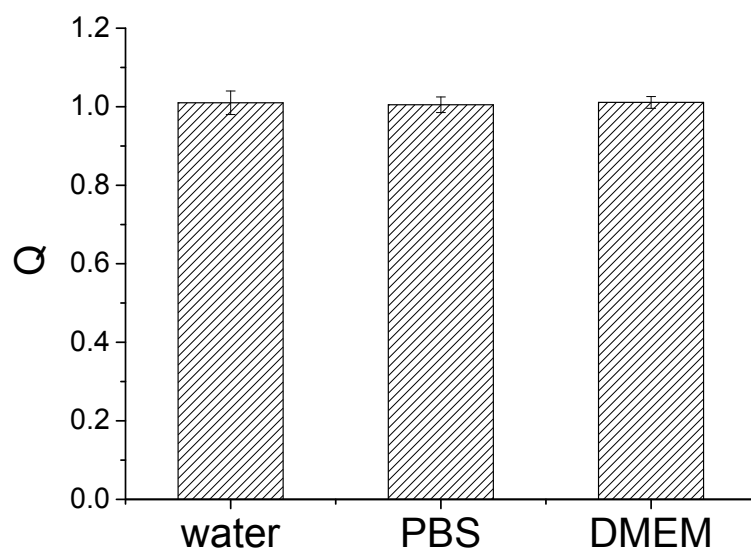


Figure S2 Swelling factors of F127-DA hydrogel (10 wt%) in water, PBS and DMEM medium at 37°C.

## Figure S3

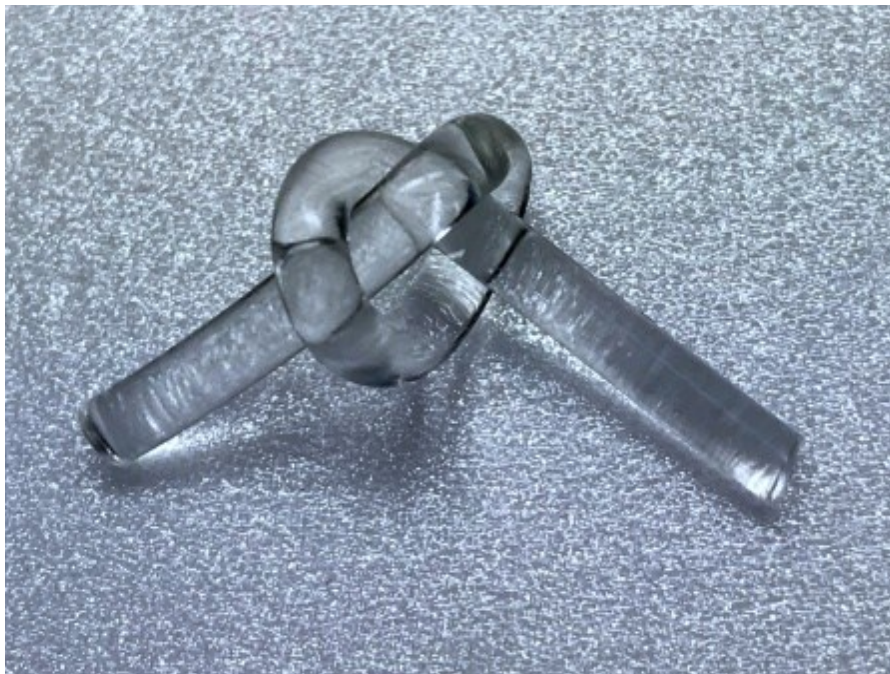


Figure S3 F127-DA hydrogel at twisted shape.

## Figure S4

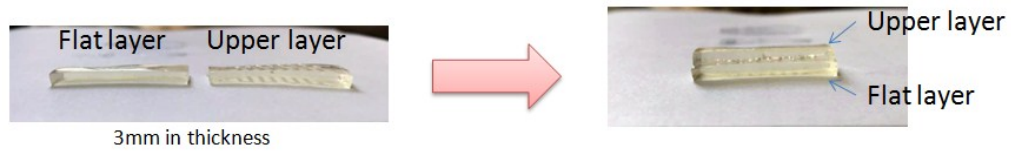


Figure S4 Assembly of hydrogel microfluidic by flat layer and upper layer.

**Figure S5**

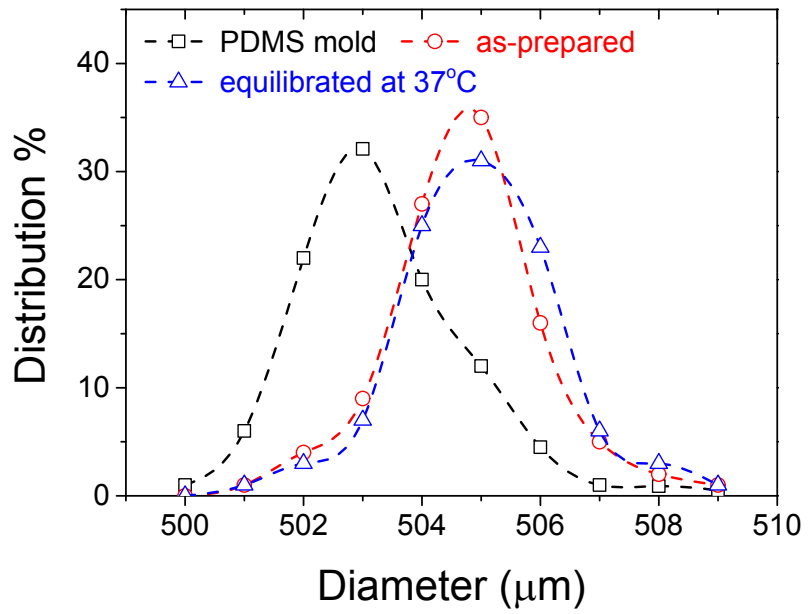


Figure S5 Distribution of channel diameters of PDMS mold and hydrogel chips.

## Figure S6

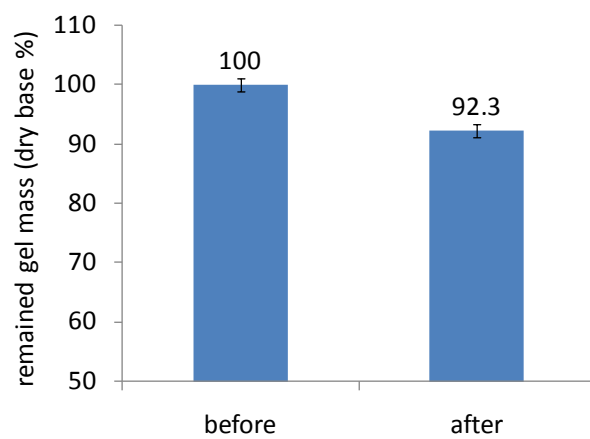


Figure S6 Degradation of hydrogel after autoclaving.

**Figure S7**

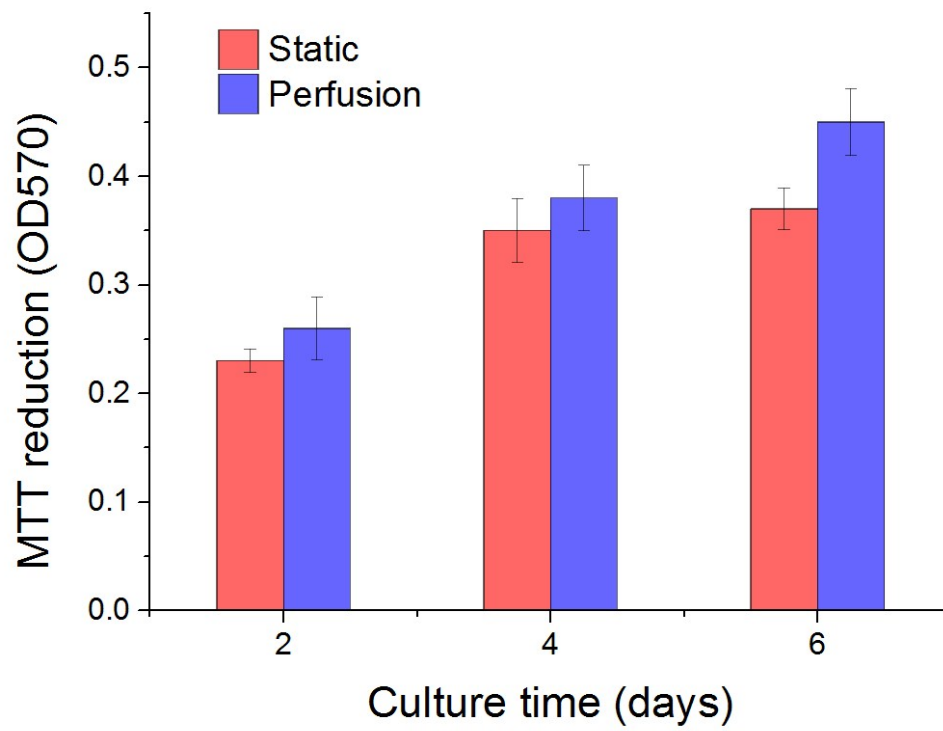


Figure S7 MTT reduction of HUVECs on vessel-on-a-chip at static and perfusion culture.