Electronic Supplementary Information (ESI)

Foil assisted replica molding for fabrication of microfluidic devices and their application in vitro

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Material and Chemicals:

All the chemicals and media used for the cell culture experiments were procured from Sigma Aldrich and GIBCO®. In current work we have used both fiber tip and metal tip pens such as Staedtler Lumocolor® non-permanent ink pen (311S, tip size 0.4 mm) and Lumocolor® non-permanent ink pen (316F, tip size 0.6 mm) were purchased from a local stationary shop. While Graphtech oil-based (tip size 0.5 mm) and water-based fibre tip pens (tip size 0.7mm) were obtained from Graphtech Corporation Ltd., Japan. All other metal tip pens used in this study such as Pilot V5 pen (0.5 mm tip), Pilot V7 (0.7 mm tip), Rotring Rapidography pen (0.3 mm tip), Parker ultrafine navigator (0.5 mm tip), Cello Techo Tip pen (0.6 mm tip) were purchased from local stationary stores.

1. Different Pen Tips used in current work.

![Figure S1: Pen tips used: (A) Fibre tips of different sizes (B) Metal tips of different size make.](image1)

2. Various devices fabricated using FARM method

![Figure S2: Images of: (A) various aluminum foil molds; (B) PDMS device corresponding to molds shown in (A); (C) PDMS devices with various geometries](image2)
3. AFM image of non shiny side and shiny side of aluminum foil

Figure S3: (A) Roughness data and 3D AFM image showing RMS roughness of about 423 nm of non-shiny side of aluminum foil. (b) Roughness data and 3D AFM image showing line-like patterns on shiny side of aluminum foil with a RMS roughness of about 90 nm.
4. Pen holder-aligner

Figure S4: Images of Graptech PHP 32 pen holder and aligner used for proper alignment of different tips.