



Figure S1. 3D-printed molds for fabrication of PDMS layers. A) Microfluidic networks, B) high wall reservoirs, and C) low wall reservoirs were printed in Master Mold Photopolymer Resin using a CADworks3D  $\mu$ Microfluidics Edition M-50 DLP 3D printer. Scale bar: 15 mm.

| Gene name | Forward primer sequence (5'-3') | Reversed primer sequence (5'-3') |
|-----------|---------------------------------|----------------------------------|
| B2m       | TTCTGGTGCTTGTCTCACTGA           | CAGTATGTTCCGGCTTCCCATTG          |
| Adm       | CACCCTGATGTTATTGGGTTCA          | CCACTTATTCCACTTCTTTTCGGA         |
| Areg      | GGTCTTAGGCTCAGGCCATTA           | CGCTTATGGTGGAACCTCTC             |

Table S1. PCR primer sequences.