

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Concentration of lambda DNA HindIII digest at the orifice of a 5 micrometer inner diameter capillary.

File Name: Supplementary Movie 2

Description: A head on view the orifice of a 10 micrometer inner diameter capillary without applied flow. A concentrated bolus does not grow around the capillary lumen.

File Name: Supplementary Movie 3

Description: Concentration bolus at 1x flow rate (60 psi) in 10 micrometer inner diameter microcapillary.

File Name: Supplementary Movie 4

Description: Concentration bolus forms donut shape at 2x flow rate (120 psi) in 10 micrometer inner diameter microcapillary.

File Name: Supplementary Movie 5

Description: Donut-shaped concentration bolus at 4x flow rate (240 psi) in 10 micrometer inner diameter microcapillary.

File Name: Supplementary Movie 6

Description: High flow rate destabilizes the concentrated DNA bolus, causing it to disengage from capillary orifice.