

## **Description of Additional Supplementary Files**

**Supplementary Movie 1:** Life cell imaging of MCF7eGFP cells seeded on PLL surface. Life cell imaging was observed from 0 h to 24 h. Frame interval time: 36 min; frame rate: 5fps.

**Supplementary Movie 2:** Life cell imaging of MCF7eGFP cells seeded on dried SC50 surface. Life cell imaging was observed from 0 h to 24 h. Frame interval time: 36 min; frame rate: 5fps.

**Supplementary Movie 3:** Life cell imaging of MCF7eGFP cells adhered on fresh SC25 inside a microfluidic channel before and after treatment with restriction enzyme BstEII-HF. This movie starts at the image  $t = 0$ , shown in Figure 5c. Frame interval time: 10 min; frame rate: 5fps.