## **Supporting Information (SI)**

## **Standing Surface Acoustic Wave Based Cell Coculture**

Sixing Li,<sup>†,‡</sup> Feng Guo,<sup>†</sup> Yuchao Chen,<sup>†</sup> Xiaoyun Ding,<sup>†</sup> Peng Li,<sup>†</sup> Lin Wang,<sup>§</sup> Craig E. Cameron,<sup>‡,</sup> and Tony Jun Huang<sup>\*,†,‡</sup>

<sup>§</sup> Ascent Bio-Nano Technologies Incorporated, State College, Pennsylvania 16803, United States
<sup>II</sup> Department of Biochemistry and Molecular Biology, The Pennsylvania State University, University Park, Pennsylvania 16802, United States

## Video captions

Supplementary Video 1: The time-lapse images taken every 20 min from 2 h to 12 h with 30

highlighted HeLa cell tracking for on-chip monoculture. HeLa cells show low level of mobility.

Supplementary Video 2: The time-lapse images taken every 20 min from 2 h to 12 h with 30

highlighted HeLa cell tracking for on-chip coculture. HeLa cells move significantly more when cocultured with HMVEC-d cells and migrate away from their original positions.

**Supplementary Video 3:** The time-lapse images taken every 20 min from 2 h to 12 h with 30 highlighted HeLa cell tracking for off-chip monoculture. HeLa cells in confluent monolayer on a petri dish also show low level of mobility.

**Supplementary Video 4:** The time-lapse images taken every 20 min from 2 h to 12 h with 30 highlighted HeLa cell tracking for off-chip coculture. HeLa cells show higher mobility compared with off-chip monoculture but tend to wander around locally with their final positions at 12 h close to their original positions at 2 h.

<sup>&</sup>lt;sup>†</sup> Department of Engineering Science and Mechanics, The Pennsylvania State University, University Park, Pennsylvania 16802, United States

<sup>&</sup>lt;sup>\*</sup> Molecular, Cellular and Integrative Biosciences Graduate Program, The Huck Institutes of the Life Sciences, The Pennsylvania State University, University Park, Pennsylvania 16802, United States