Title: Supplementary Data1.

**Description:** Differential gene expression of mES cells

**Title:** Supplementary Data 2.

**Description:** Differential gene expression of drug treated and untreated cells

**Title:** Supplementary Movie 1.

**Description:** Paired-seq operation on chip

**Title:** Supplementary Movie 2.

**Description:** Function of control layer

Title: Supplementary Movie 3.

Description: Paired unit isolation

Title: Supplementary Movie 4.

Description: Beads capture-1 row

Title: Supplementary Movie 5.

**Description:** Cell capture

**Title:** Supplementary Movie 6. **Description:** Blocking effect **Title:** Supplementary Movie 7.

**Description:** Mixing

**Title:** Supplementary Movie 8. **Description:** Single cell lysis