



**Supplemental Figure 3. Robustness of FitCUT&RUN with reduced input material in K562 cells.** (A) The genome browser view shows the ATF1 FitCUT&RUN signal for different input materials (three replicates for each). A similar signal represents the reproducibility of the FitCUT&RUN method with low-input material. (B) Scatterplots present the high correlation of the ATF1 FitCUT&RUN signal between different input materials. (C) Venn diagram showing the overlap of ATF1 FitCUT&RUN peaks with different input cells. The majority of peaks based on the low-input material showed high overlap with those obtained from 1×10<sup>5</sup> cells. (D) Boxplots showing the normalized ATF1 FitCUT&RUN signal using 1×10<sup>5</sup> cells in three groups of peaks, i.e., only detected in the FitCUT&RUN using 1×10<sup>5</sup> cells, overlap with FitCUT&RUN using 1×10<sup>4</sup> cells, and overlap with FitCUT&RUN using 5×10<sup>3</sup> cells. The peaks detected with the reduced input material (5×10<sup>3</sup> cells) showed a higher signal than those in the other two groups, proving the reliability of the FitCUT&RUN method with low-input material. (E, F) Scatterplots present the correlation of the ELF1 (E) and ATF1 (F) FLAG-CUT&RUN signal between different input materials.