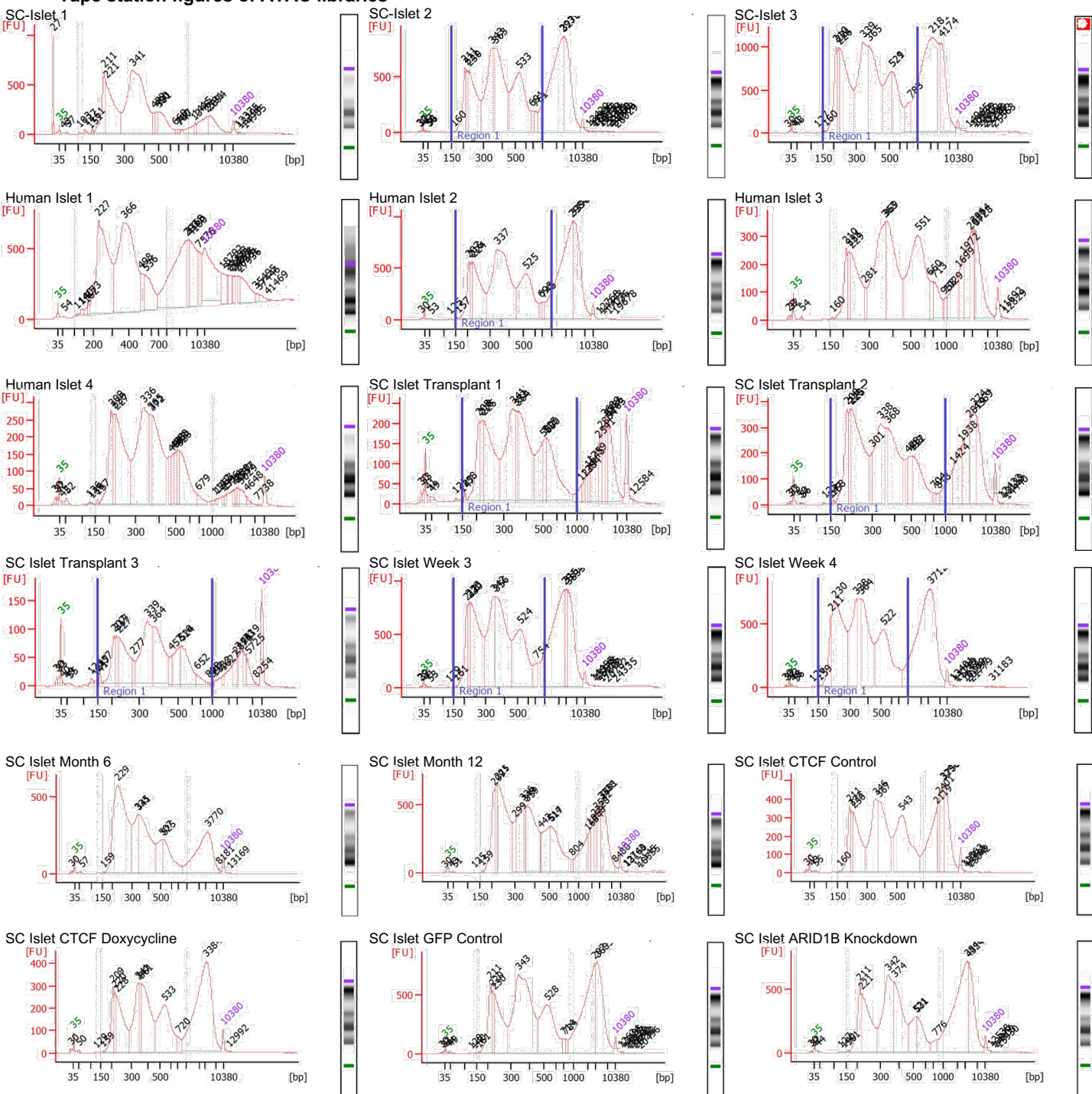


# Single-nucleus multi-omics of human stem cell-derived islets identifies deficiencies in lineage specification

In the format provided by the  
authors and unedited

## Supplementary Figure 1

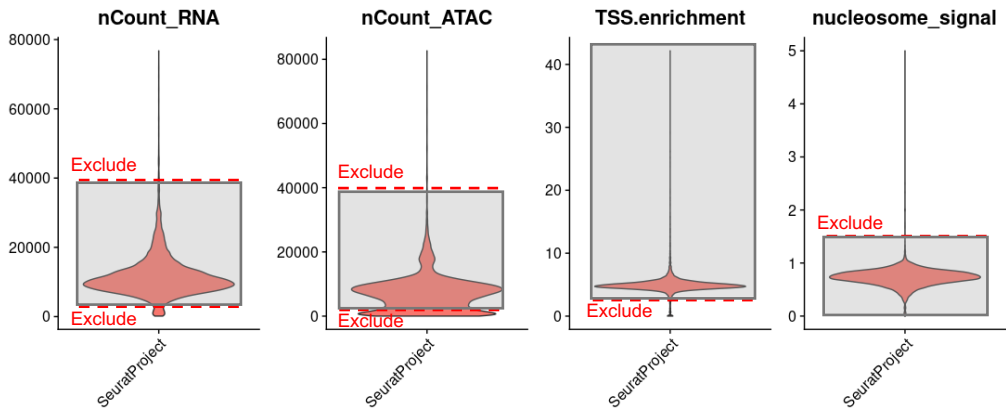
### Tape station figures of ATAC libraries



Supplementary Figure 1. Tape station figures of single nuclei ATAC libraries for all multiome samples.

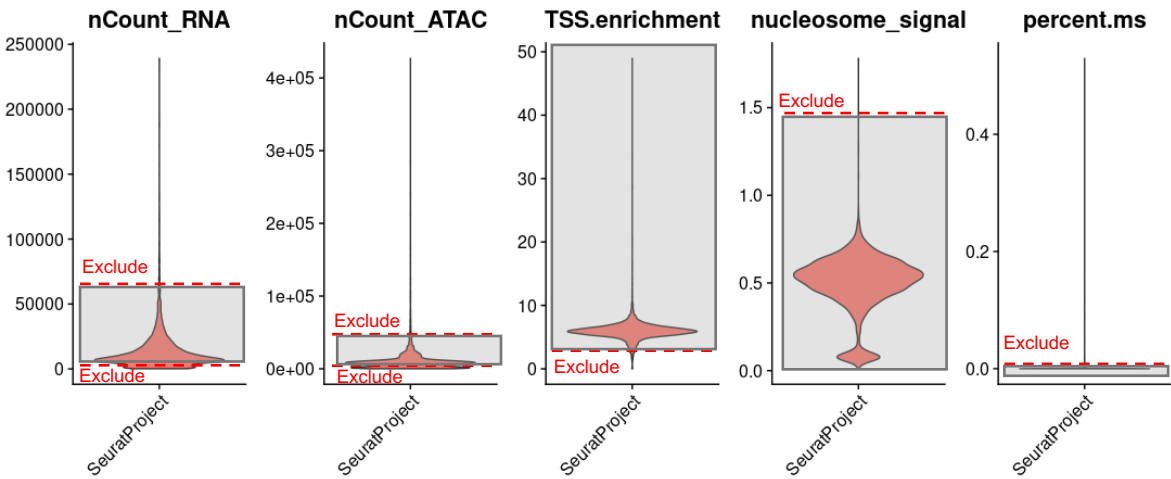
Cell exclusion strategy for single-cell multiome analysis

SC-Islet and human islet

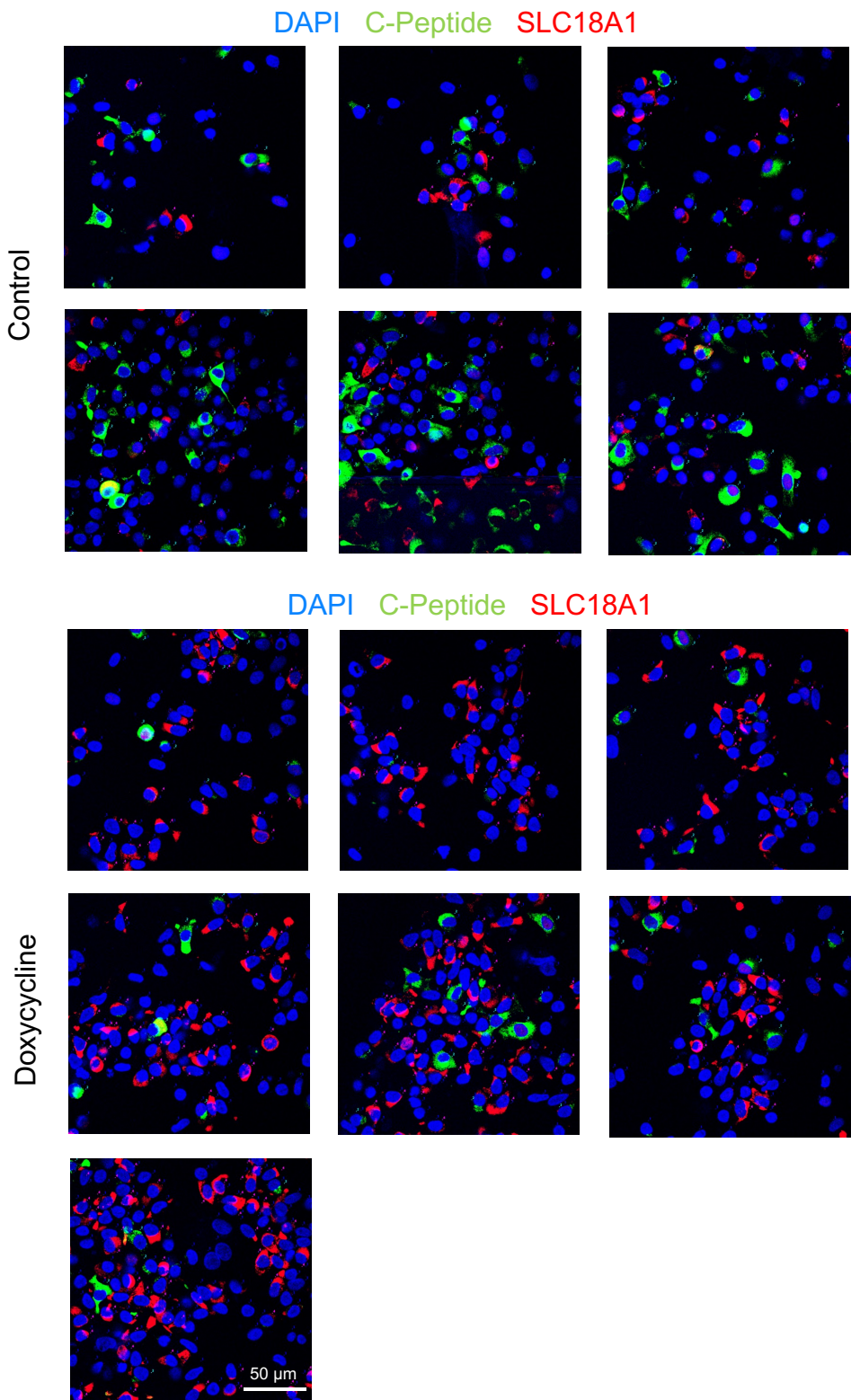


Transplanted SC-islet

TTC36 expression

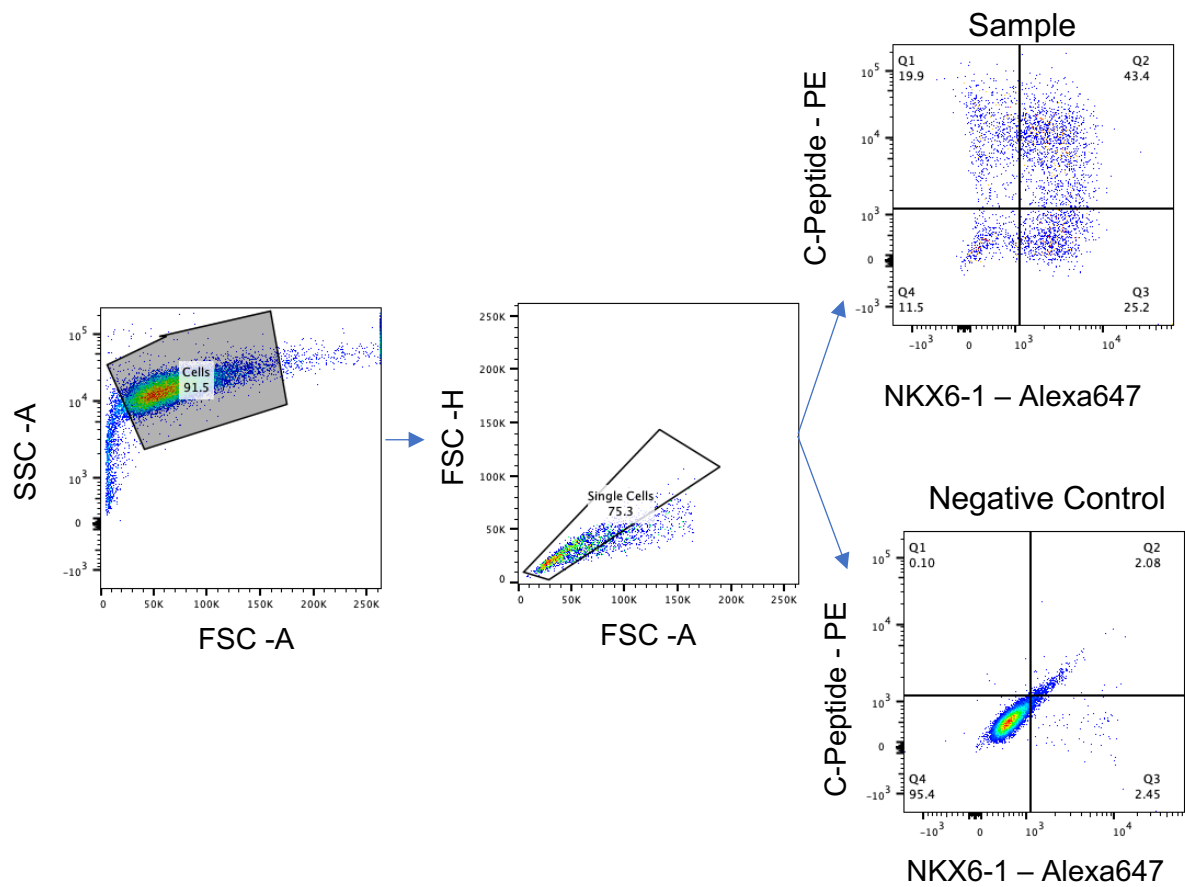


Supplementary Figure 2. Cell exclusion strategy to remove low quality cells for the single-nuclei multiome analysis. Ranges outside the shaded regions were excluded.



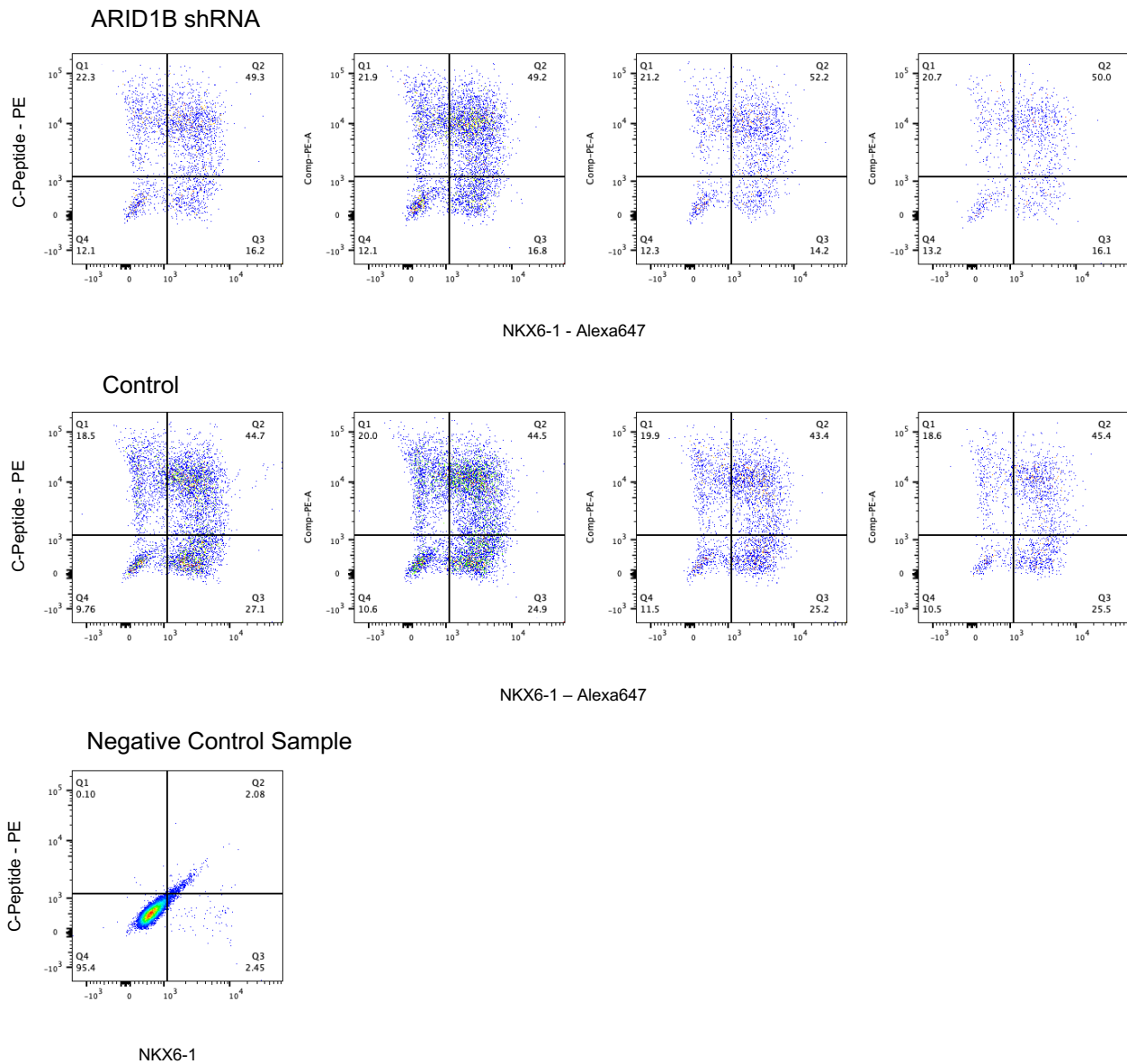
Supplementary Figure 3. Immunofluorescent images showing  $\beta$ -cell marker C-peptide and EC-cell marker SLC18A1 stains from individual samples used to quantify  $\beta$ -cell and EC-cell composition.

Supplementary Figure 4



Supplementary Figure 4. Gating strategy used for flow cytometry analysis.

Supplementary Figure 5



Supplementary Figure 5. Individual flow cytometry graphs showing stem-cell derived  $\beta$ -cell makers NKX6-1 and C-Peptide from differentiated SC-islets with and without ARID1B knockdown.