

**Supplementary Figure S1** | **Validation of the autochthonous barcoding model. A,** Separate lung sections displaying positivity for both CAS9 and GFP. **B,** Co-staining of representative sections showing colocalization of both CAS9 and GFP. **C,** Flow-sorting strategy for isolating GFP+ cells from harvested lungs transduced with Adeno-Cre and the AAV-LBC viruses. **D,** UMAP plot displaying expression of GFP in the autochthonous scRNA-seq data.