



**Figure S6: Expression of fibroblast IL-33 is extrinsically induced by epithelial Kras<sup>G12D</sup> and requires JAK1/2-STAT3 activation throughout tumorigenesis.** (A) Dot plot representation of population-defining marker genes across the merged iKras<sup>G12D</sup> scRNAseq dataset. All experimental groups and timepoints are represented. (B) Histogram depicting the frequency of each cell type across groups in the scRNAseq dataset. N = number of mice pooled for each dataset. (C) Violin plots depicting fibroblast gene expression levels per timepoint and split by iKras<sup>G12D</sup> “ON” or “OFF” status. (D) Violin plots depicting mesothelial *Il33* expression level per timepoint and split by iKras<sup>G12D</sup> “ON” or “OFF” status. For scRNAseq statistics, Wilcoxon rank sum tests were performed between iKras<sup>G12D</sup> “ON” or “OFF” pairings per each timepoint, and Bonferroni adjusted p values are displayed above violins. (E) Co-IF staining of IL-33 (green), pSTAT3 (red), PDGFR $\alpha/\beta$  (cyan), and DAPI (white) in 3wk iKras<sup>G12D</sup> “ON” and “OFF” pancreata. (F) Co-IF staining of pSTAT3 (green), PDGFR $\alpha/\beta$  (red), E-Cadherin (white), and DAPI (blue) in 3wk iKras<sup>G12D</sup> “ON” and 3wk iKras<sup>G12D</sup> “ON” + JAK1/2i pancreata. (G) Co-IF staining of pSTAT3 (red), PDGFR $\alpha/\beta$  (green), E-Cadherin (white), and DAPI (blue) in *CreER* and *CreER;Stat3<sup>ff</sup>* orthotopic tumors. (H) Relative and absolute tumor sizes from *CreER* and *CreER;Stat3<sup>ff</sup>* orthotopic tumors. For staining quantification, individual ROIs composed of a single PDGFR $\alpha/\beta$ <sup>+</sup> cell were selected and IL-33 and/or pSTAT3 corrected total cell fluorescence (CTCF) was quantified per individual ROI. N = 3 mice were quantified per group. N in figure represents the number of ROIs measured per group. P values are two-tailed Student’s *t* test. Line = Mean CTCF.