

Supporting Information

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Fig. S1. Deletion of *Shh* is dispensable for normal pancreas development. Representative histology of pancreata from a 60-wk-old wild-type mouse (Left), 24-wk-old *Ptf1a-Cre:Shh^{fl/fl}* mouse (Center), and 60-wk-old *Ptf1a-Cre:Shh^{fl/fl}* mouse (Right).

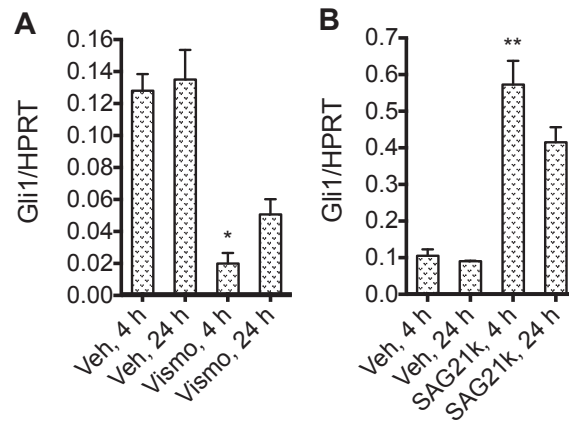


Fig. S2. Pharmacologic modulation of Hh pathway response in mice. (A) Normalized *Gli1* expression in pancreata of 9-wk-old male FVB mice given either MCT vehicle ($n = 3$) or vismodegib at 100 mg/kg ($n = 3$) by oral gavage daily for 5 d. Pancreata were harvested either 4 h or 24 h after the last dose of drug as shown. A 6.4-fold relative reduction of *Gli1* expression was observed in vismodegib-treated mice (Veh 4 h vs. Vismo 4 h, $*P = 0.0001$). (B) Normalized *Gli1* expression in pancreata of 9-wk-old male FVB mice given either MCT vehicle ($n = 3$) or SAG21k at 5 mg/kg ($n = 3$) by oral gavage daily for 5 d. Pancreata were harvested either 4 h or 24 h after the last dose of drug as shown. A 5.5-fold relative increase in *Gli1* expression was observed in SAG21k-treated mice (Veh 4 h vs. SAG21k 4 h, $**P = 0.002$). Error bars indicate SEM.

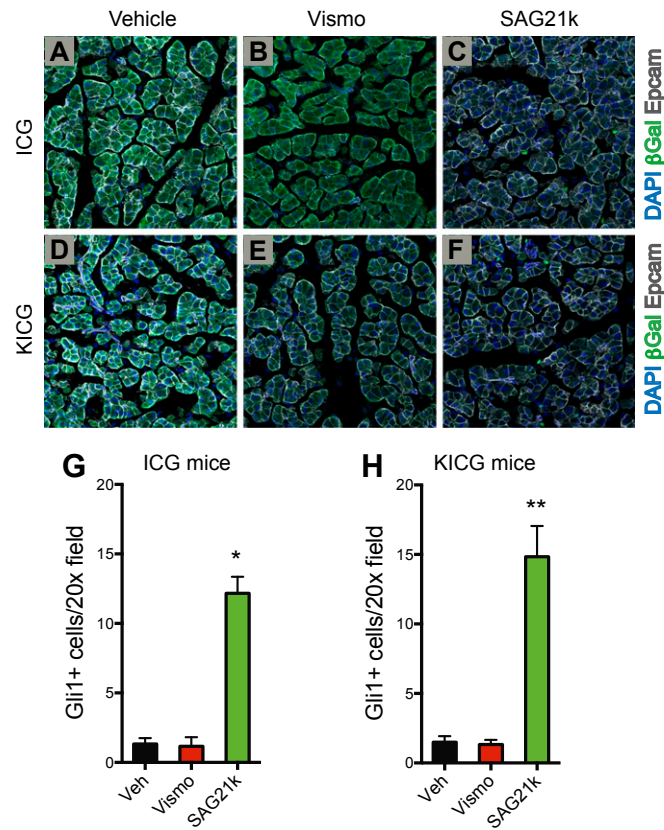


Fig. S3. Modulation of Hh response without concomitant cerulein controls the number of *Gli1*⁺ cells in pancreata. (A–C and G) ICG mice were treated as in Fig. 4, except that cerulein was not administered. Vismodegib does not alter significantly the number of *Gli1*⁺ cells. However, SAG21k increases the number of *Gli1*⁺ cells by 9.1-fold (**P* < 0.0001, *n* = 6). Error bars indicate SEM. (D–F and H) KICG mice were similarly examined. Likewise, vismodegib does not alter the number of *Gli1*⁺ cells whereas SAG21k increases the number by 9.9-fold (***P* < 0.0001, *n* = 6). Error bars indicate SEM.

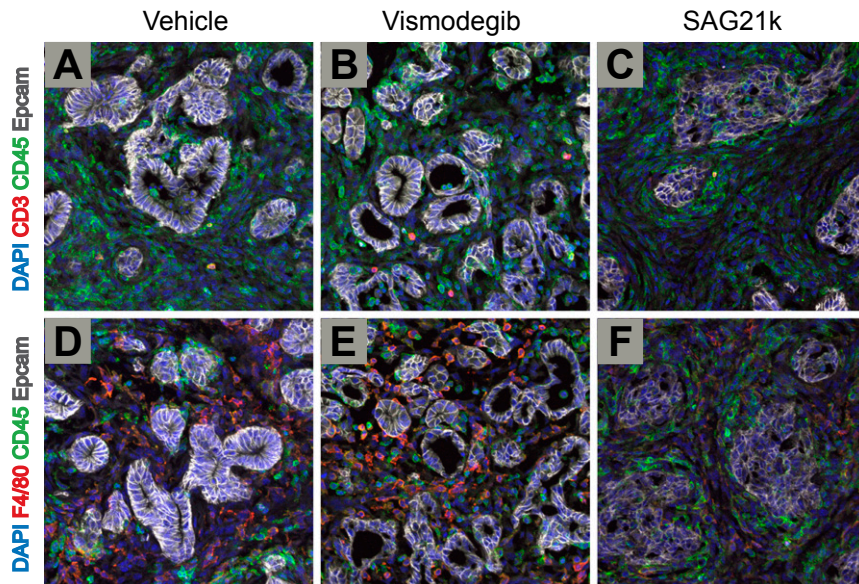


Fig. S4. Identity of CD45-positive hematopoietic cells during cerulein-enhanced oncogenesis. (A–F) Confocal images of pancreata of cerulein-treated KICG mice are shown. (A–C) CD3⁺ T cells (orange or yellow) represent a minor fraction of the CD45⁺ inflammatory infiltrate in vehicle-, vismodegib-, and SAG21k-treated mice. (D–F) F4/80⁺ macrophages (orange or yellow) also represent a fraction of CD45⁺ cells but appear more prevalent than CD3⁺ cells under all three treatment conditions. (C and F) Notably, the zone of CD45⁺ cells around globular epithelial structures in SAG21k-treated mice does not contain a predominance of either CD3⁺ or F4/80⁺ cells.