## **Supplementary Figure 1**



iKC model study design

**Figure. S1. Flow chart design showing experimental strategies of the iKC mice model.** Overview of inducible KC (iKC) model breeding strategy, animal randomization, treatment procedures (route of administration, tamoxifen dosage, schedule), and endpoints were described as a schematic diagram.

## **Supplementary Figure 2**



**Figure. S2. Expression profile of transmembrane mucin Muc16 in the tamoxifen-induced iKC mouse model.** IHC analysis for Muc16 expression was performed on pancreatic tissues isolated from corn oil- and tamoxifen-treated iKC mice. Expression of Muc16 was not detected in corn oil-treated mice (left column) but increased progressively from 10 to 50 weeks following tamoxifen injection (right column).



**Figure. S3**. **Depletion of Kras<sup>G12D</sup> allele in pancreatic cancer cells.** Knock-down of Kras<sup>G12D</sup> in CD-18/HPAF using the pRetro.Puro vector carrying an shRNA against mutated Kras led to a significant down-regulation of *MUC5AC*. Beta-actin served as an internal loading control.

## Supplementary Figure 4





**Figure. S4. Expression profile of Ncoa3 and p-cJun in the tamoxifen-induced iKC mouse model.** IHC studies using Ncoa3 and p-cJun antibodies were performed on pancreatic tissues isolated from corn oil- and tamoxifen-treated iKC mice. (A) Expression of Ncoa3 and (B) p-cJun in the nucleus of iKC pancreas cells was low (basal level) but increased upon tamoxifen injection.