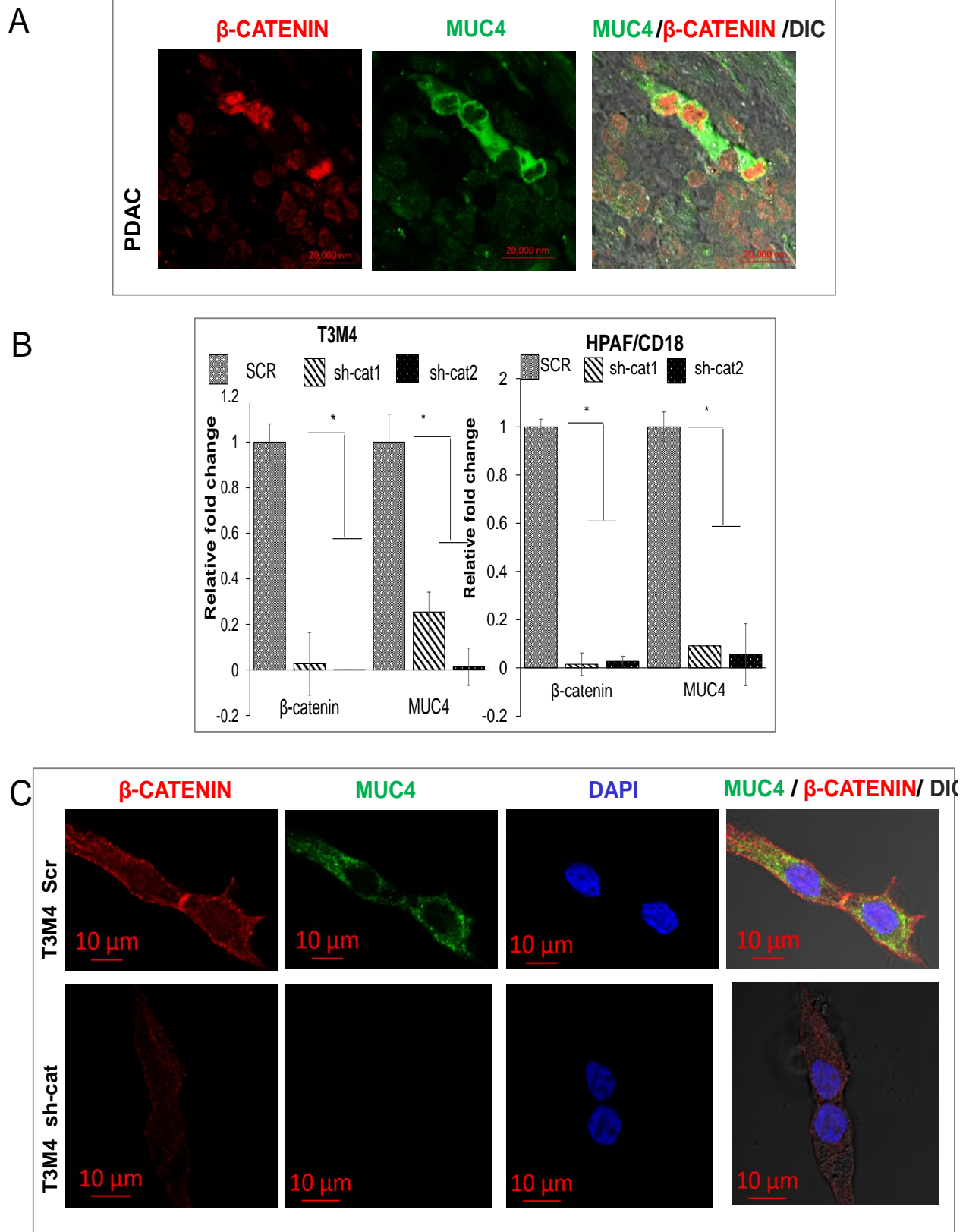


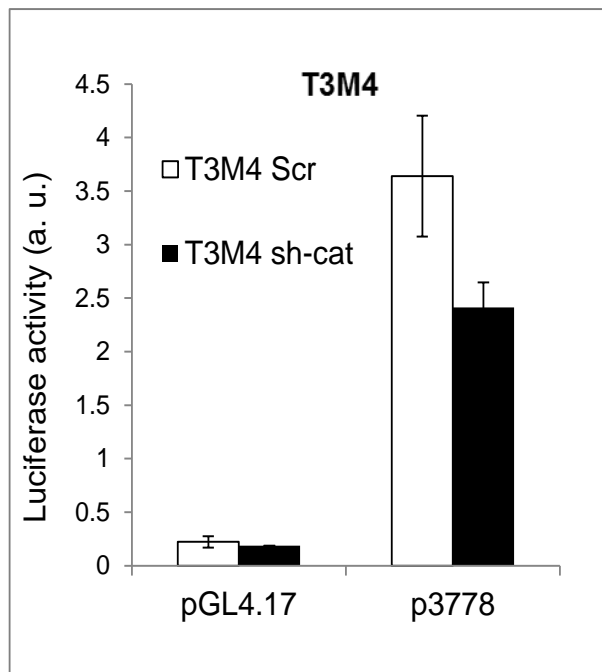
Supplementary Figure 1



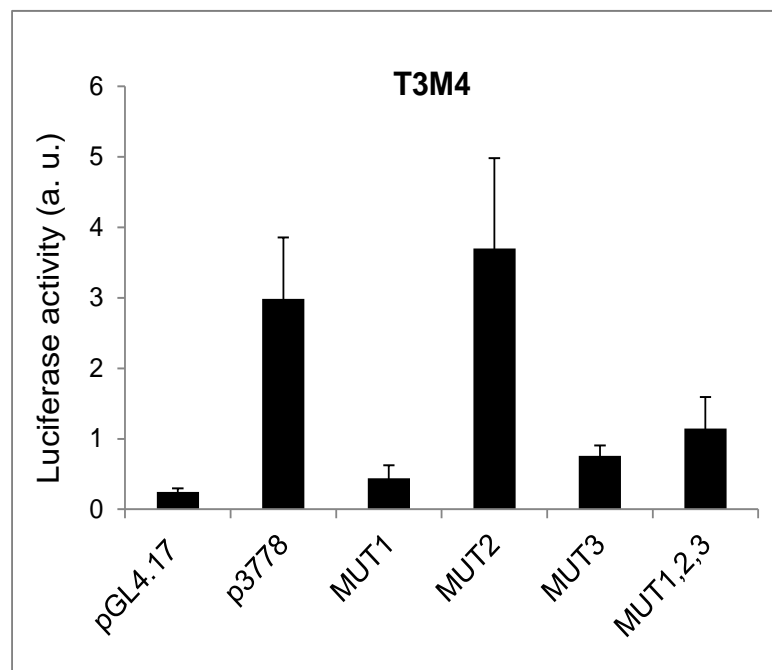
Supplemental Figure 1. β -catenin KD reduces *MUC4* transcript and protein(A) Tissue confocal microscopy image of PDAC tissue showing co-localization of nuclear β -catenin (red) and MUC4 (green). (B) The qPCR analysis of β -catenin and MUC4 RNA levels in CDA8/HPAF and T3M4; * $p < 0.0004$. (C) Confocal microscopy analysis was used to analyze MUC4 (green) and β -catenin (red) levels in T3M4 Scr and KD cells

Supplementary Figure 2

A



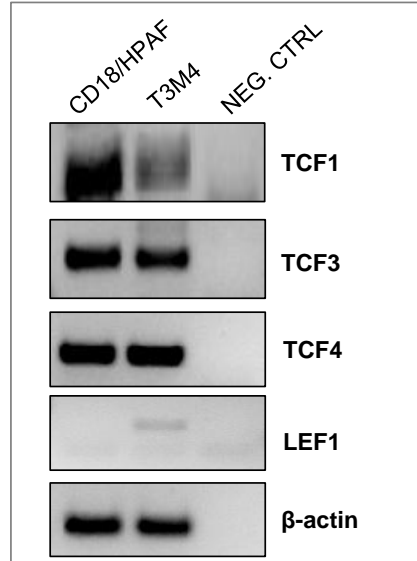
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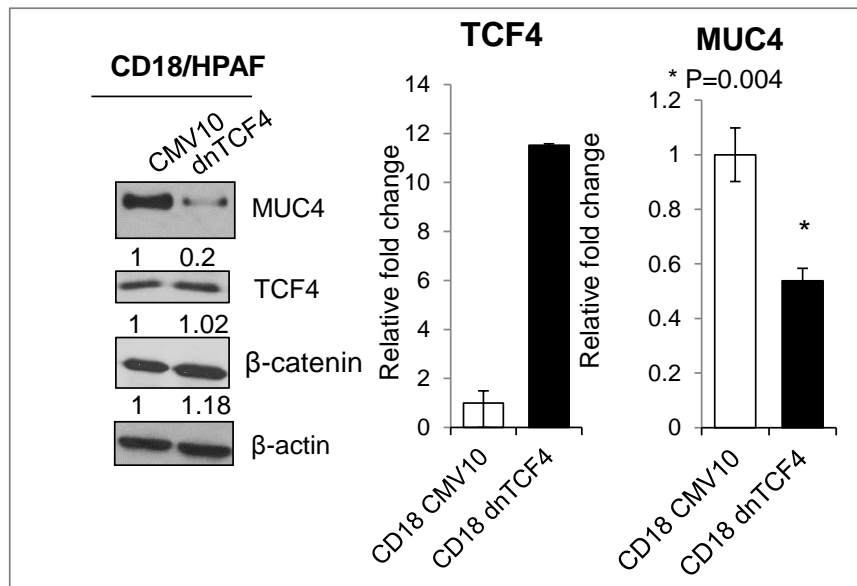
Supplemental Figure 2. MUC4 promoter luciferase studies with T3M4 (A) *MUC4* promoter luciferase studies with p3778 in T3M4 Scr and KD cells. (B) The p3778 promoter construct with each of the three putative TCF/LEF sites mutated (*i.e.* -2612:MUT1,-3226:MUT2,-3408: MUT3) was transfected into T3M4 cells in the presence of 4ACAT. The pCMV9-Renilla vector was used as an internal transfection control.

Supplementary Figure 3

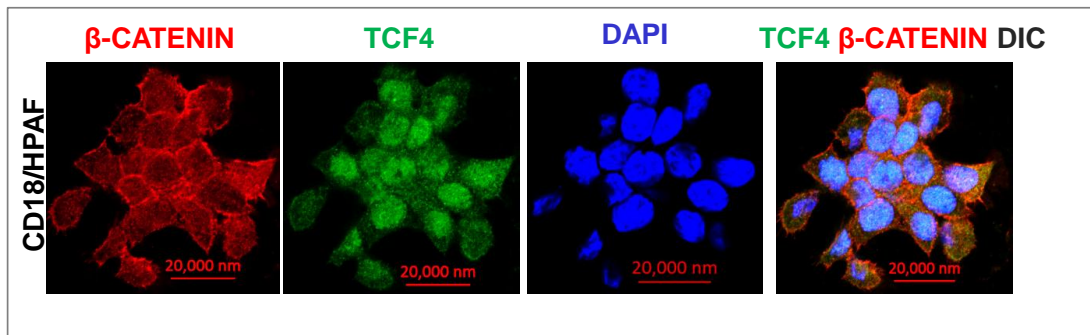
A



B

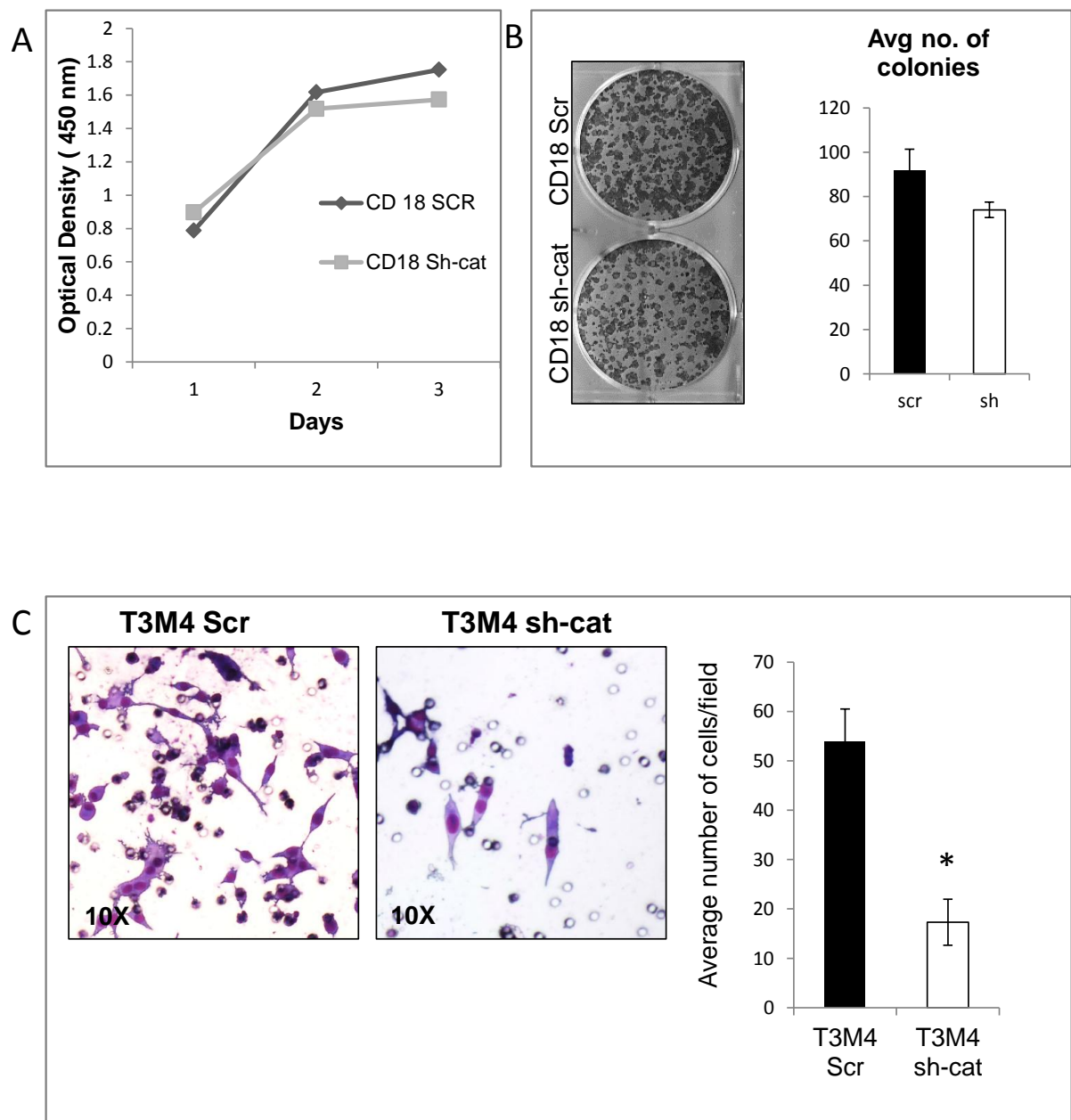


C



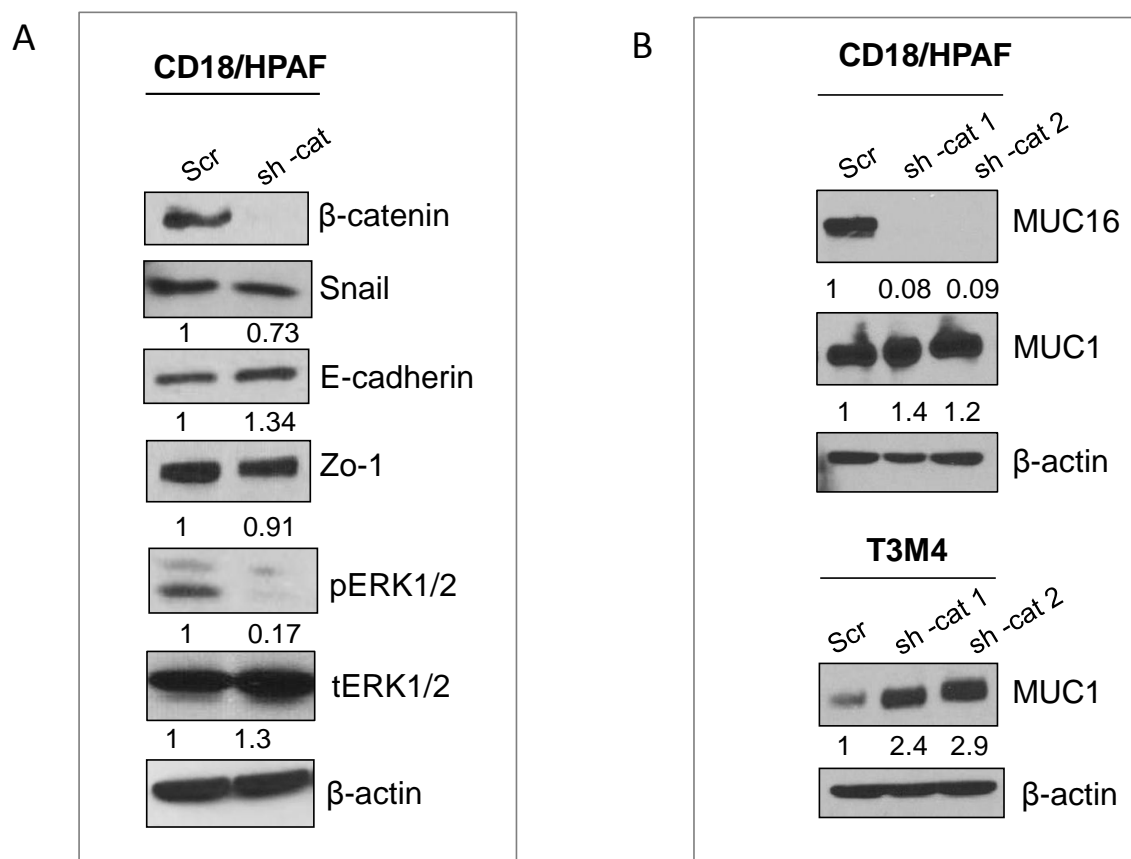
Supplemental Figure 3. β -catenin partners with TCF4 in the nucleus (A) CD18/HPAF and T3M4 cells were profiled for the expression of the TCF/LEF group of transcription factors. Figure shows RT-PCR results. (B) Transient transfection with dominant-negative TCF4 (dnTCF4) in CD18/HPAF cells resulted in decreased MUC4 protein and RNA levels compared to the vector control. (C) Confocal microscopy analysis was used to analyze TCF4 (green) and β -catenin (red) levels in CD18/HPAF cells

Supplementary Figure 4



Supplemental Figure 4. Functional assays with β -catenin KD cells (A) The cell proliferation assay (WST-1) showed that CD18/HPAF shRNA-cat cells proliferated at a slower rate than Scr control cells. (B) The colony formation assays performed for CD18/HPAF Scr and CD18/HPAF shRNA-cat cells showed that the CD18/HPAF shRNA-cat cells formed fewer colonies than CD18/HPAF Scr cells. (C) Transwell migration assay with T3M4 Scr and KD cells.

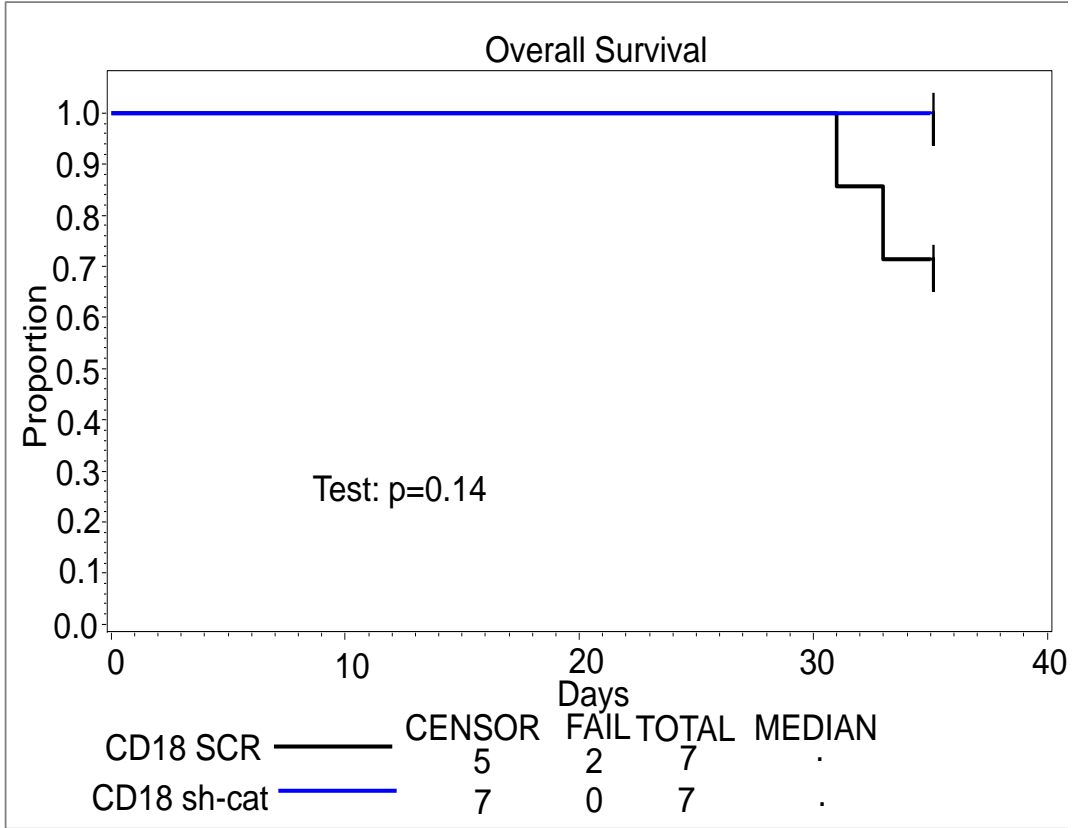
Supplementary Figure 5



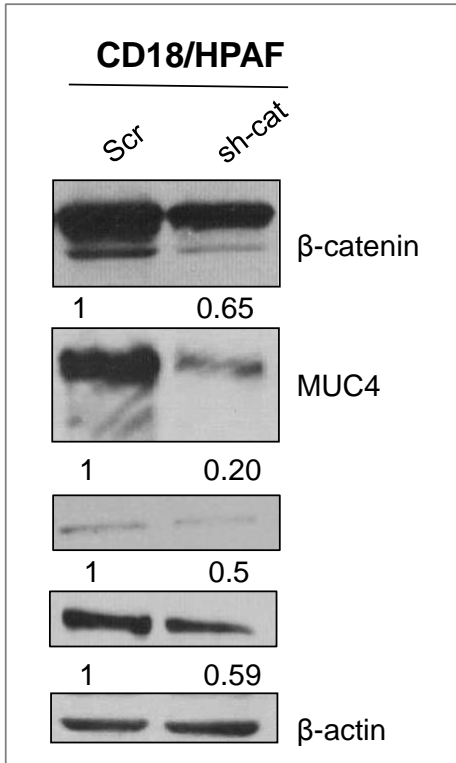
Supplemental Figure 5. Altered EMT markers in CD18/HPAF and the effect of β -catenin KD on MUC1 and MUC16 (A) Western blot analysis of CD18/HPAF Scr and CD18/HPAF shRNA-cat cells showing levels of β -catenin, Snail, E-cadherin, Zo-1, pERK1/2, total ERK, and β -actin (loading control). (B) Protein expression levels of MUC1 and MUC16 in CD18/HPAF, T3M4 Scr, and KD cells

Supplementary Figure 6

A



B



Supplemental Figure 6. Orthotopic implantation: Kaplan-Meier survival curve and western blot analysis of tumor lysates (A)

Kaplan-Meier curve showing reduced survival of mice injected with CD18/HPAF Scr control cells compared to KD cells. **(B)** Tumor

lysates from mice orthotopically implanted with CD18/HPAF Scr and KD cells were probed with antibodies for β -catenin, MUC4,

pHER2, and tHER2