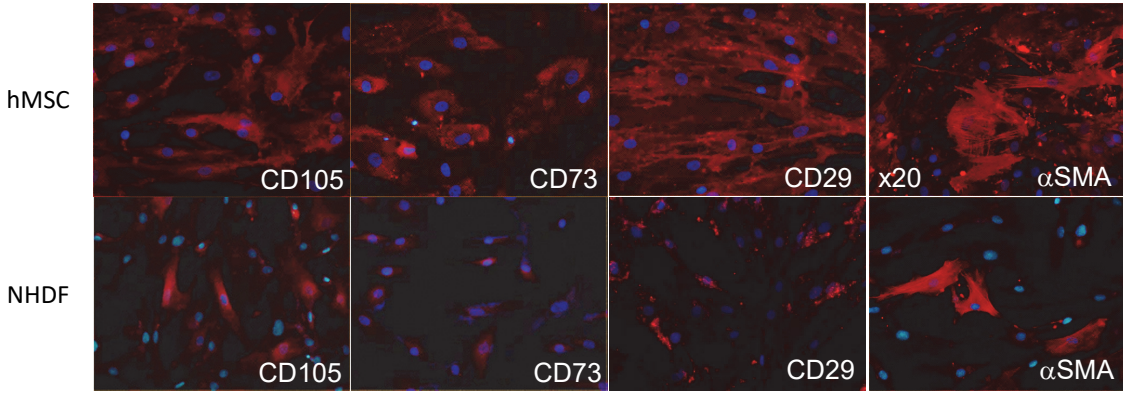


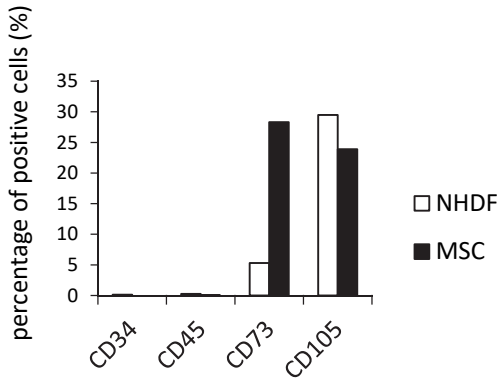
# Supplementary Figure 1

**A**

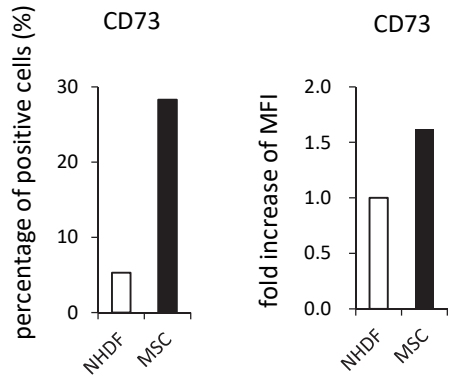


	CD105	CD73	CD29	$\alpha$ SMA	CD45	CD31	CD34
hMSC	+	++	++	+	-	-	-
NHDF	+	+	partially +	partially +	-	-	-

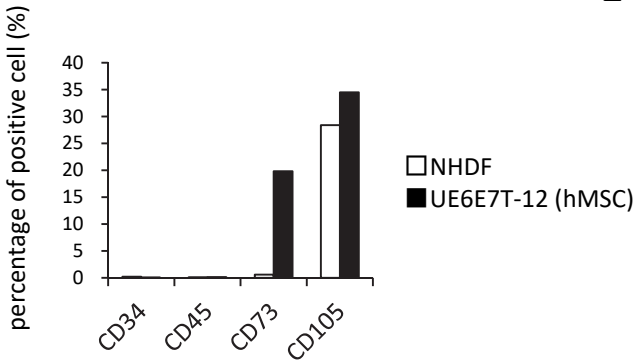
**B**



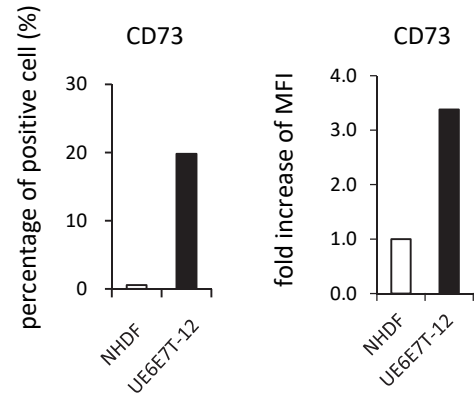
**C**



**D**

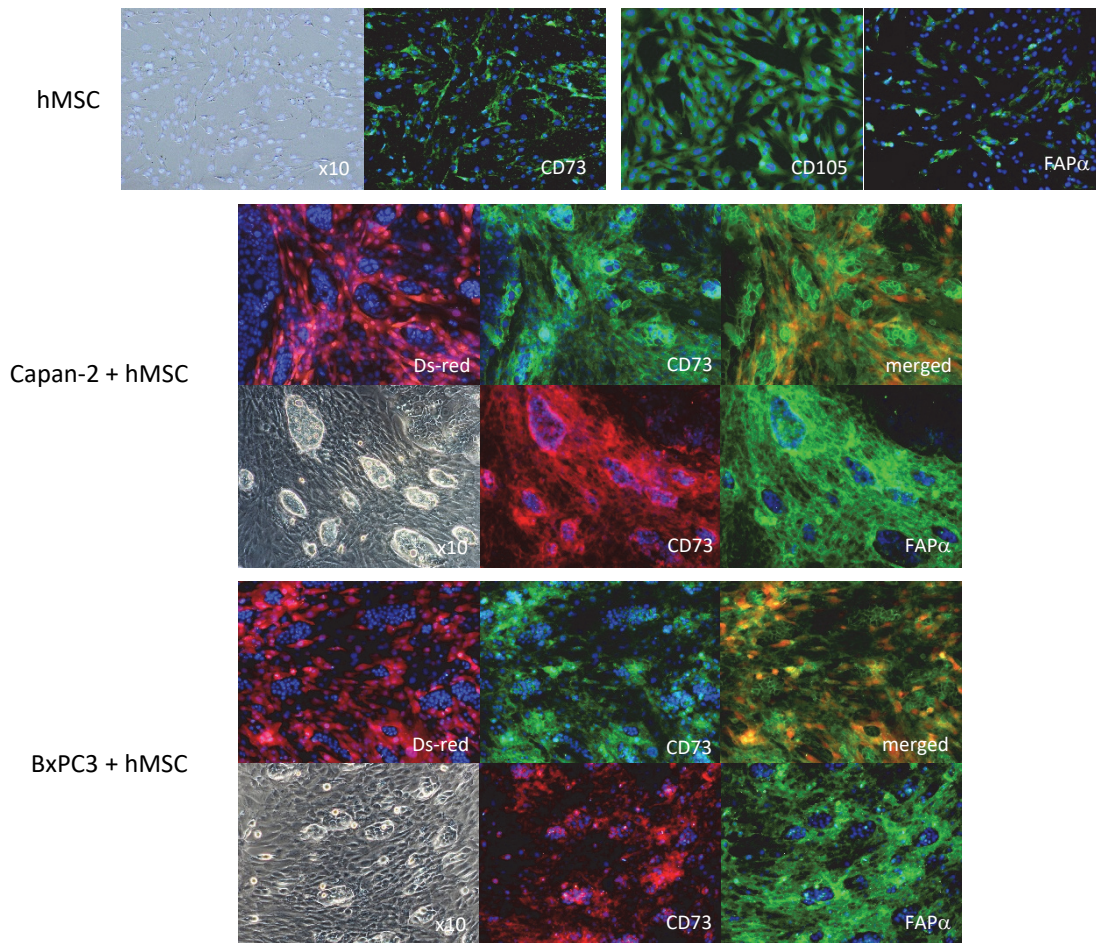


**E**



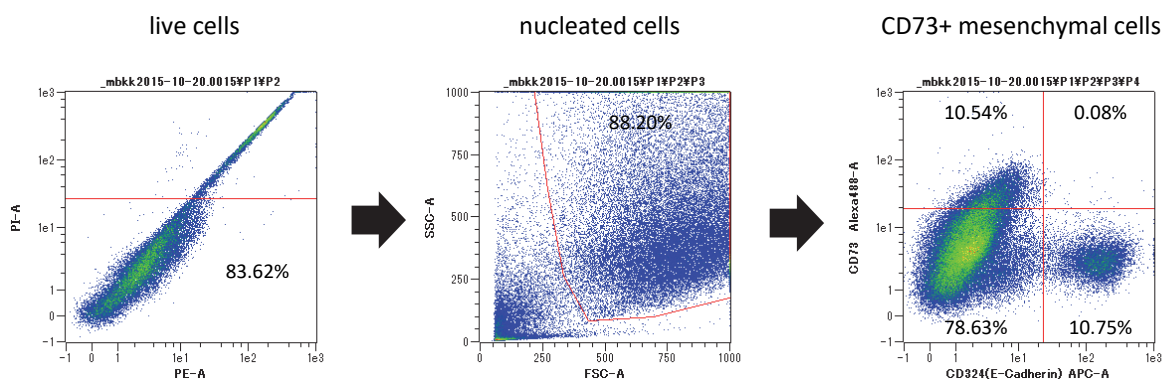
# Supplementary Figure 2

**A**



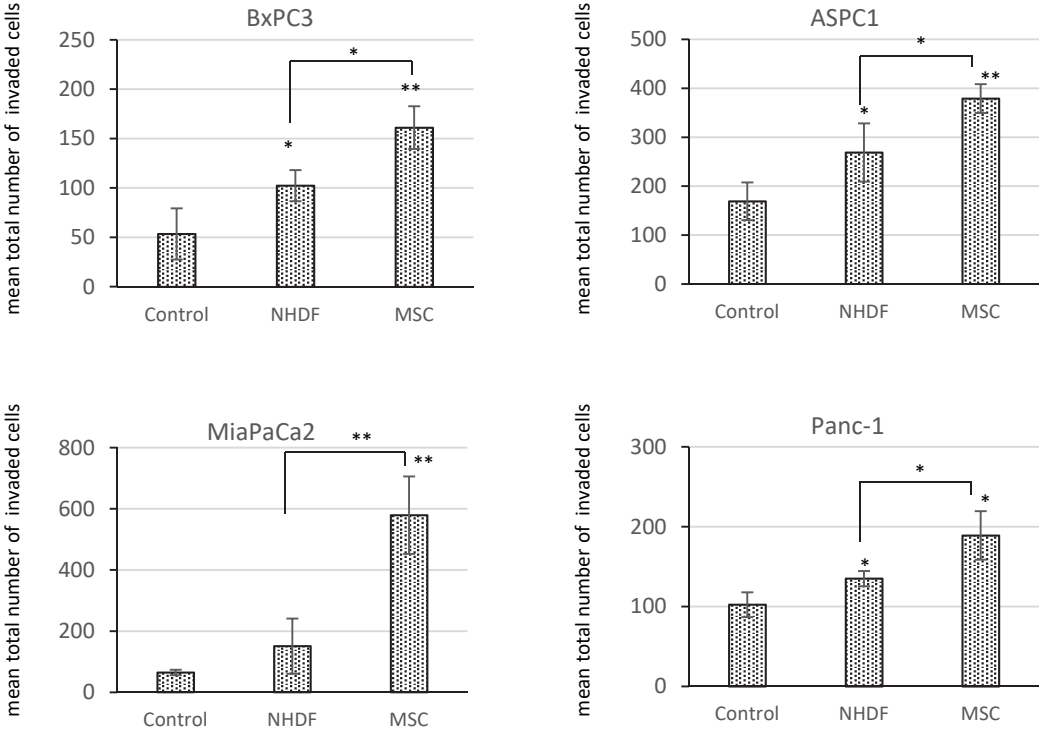
**B**

tissue dissociation to individual cell (BxPC3-xenografted *in vivo* tumor)  $\rightarrow$  isolated mouse cells from total cells  $\rightarrow$  double staining with anti-mouse CD324 + CD73 Abs to identify CD73+ murine mesenchymal cells



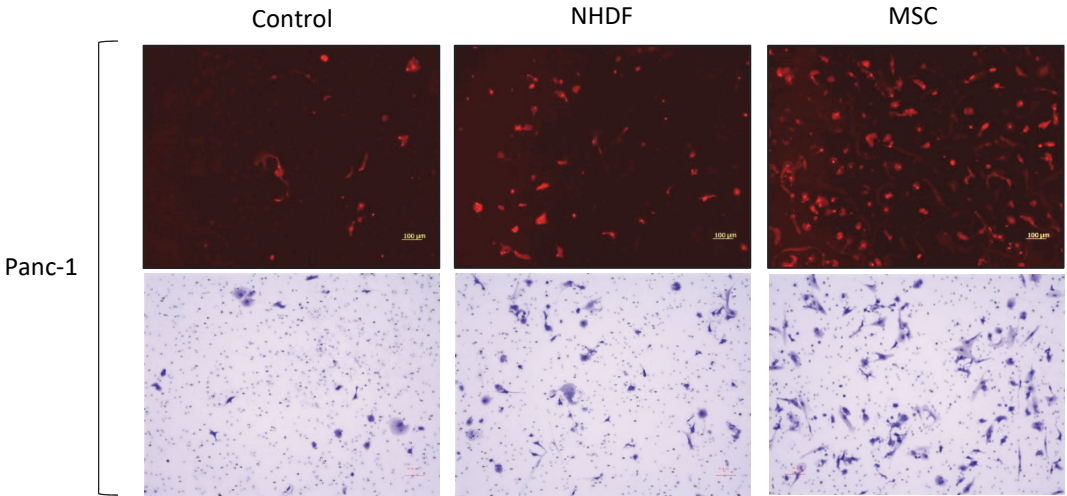
# Supplementary Figure 3

**A**



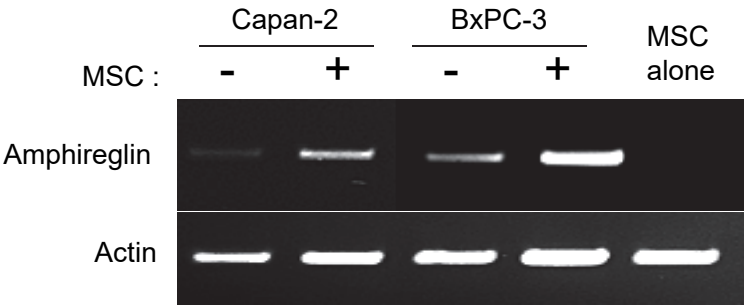
\*  $P < 0.05$ , \*\*  $P < 0.01$

**B**

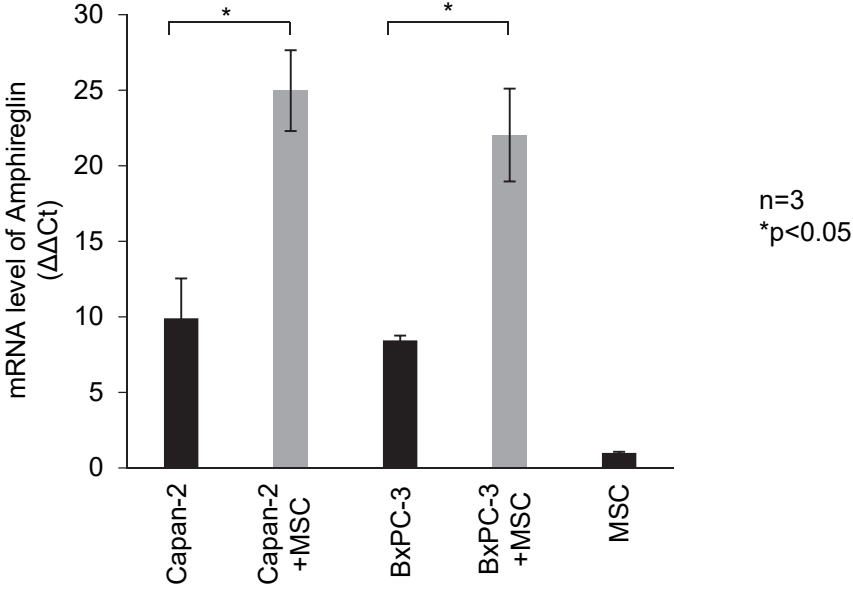


# Supplementary Figure 4

**A**



**B**



Supplementary Figure legends:

**Supplementary Figure 1.** Immunophenotyping of human MSC in comparison with normal human dermal fibroblast (NHDF). A. immunofluorescence using CD105, CD73 CD29 and  $\alpha$ SMA which expression are shared in MSC as consensus markers. B and C. Quantitative analysis of frequency and intensity of CD73 antigen expression between NHDF and MSC based on the result of FACS analysis. Fold increase of mean fluorescence intensity (MFI) of MSC was indicated when that of NHDF was set as 1.0. D and E. The result of CD73 and CD105 expression by FACS analysis in another combination of hMSC (UE6E7T-12) and NHDF different from the hMSC and NHDF shown in A, B and C. Fold increase of mean fluorescence intensity (MFI) of UE6E7T-12 was indicated when that of NHDF was set as 1.0.

**Supplementary Figure 2.** Differentiation of CD73-positive MSC to CAF and homing of CD73-positive murine stromal cells to BxPC3-xenografted PDAC tumor in vivo. A. Immunofluorescence of cocultured hMSCs with PDAC cells (Capan-2, BxPC3). 120 hours after cocultivation. B. Analysis of immunophenotyping for tumor-dissociated cells showing the presence of CD73-positive murine mesenchymal cells in the tumor. BxPC3

cells were intraperitoneally xenografted to Balb/c nu/nu mouse and the grown tumor was collected and dissociated to individual cell for FACS analysis using tissue separator and magnetic beads separation system.

**Supplementary Figure 3.** Invasion assay of MSC-cocultured PDAC cells. A. AsPC1, MiaPaCa-2, Panc-1, and BxPC3 cells originated from different PDAC patients were examined the increase of invasive property with or without MSC using Boyden chambers. The result of each PDAC line was shown as a graph. B. Visualization of invaded Panc-1 cells from the Boyden chamber assay. Panc-1 cells were labeled with PKH26 (red color).

**Supplementary Figure 4.** Induction of *AREG* on cultured PDAC cells (Capan-2 and BxPC3) with or without hMSC. A. semiquantitative RT-PCR to detect *AREG* mRNA from the cocultured cells. 120 hours after coincubation. B. qPCR using human *AREG* specific primers for the cocultured RNA samples mentioned above. Means and s.d. of triplicates are shown. (n=3, \*p<0.005).