A

L3.6pl (parental)
control vector transfected
STAT5b clone 1
STAT5b clone 2

STAT5b

β-actin

B

control vector transfected
STAT5b clone 1
STAT5b clone 2

STAT5b

pSTAT3^{Tyr705}

STAT3

pAKT^{Ser473}

AKT

c-Myc

β-actin

Figure W1. Effects of targeting STAT5b on signaling in the L3.6pl human pancreatic cancer cell line *in vitro*. (A) Knockdown of STAT5b in L3.6pl human pancreatic cancer cells using an shRNA approach was verified by Western blot analysis. (B) Inhibition of STAT5b leads to a reduction of constitutive STAT3 phosphorylation and c-Myc expression in cancer cells. Phosphorylation of AKT^{Ser473} was observed on STAT5b blockade *in vitro*.
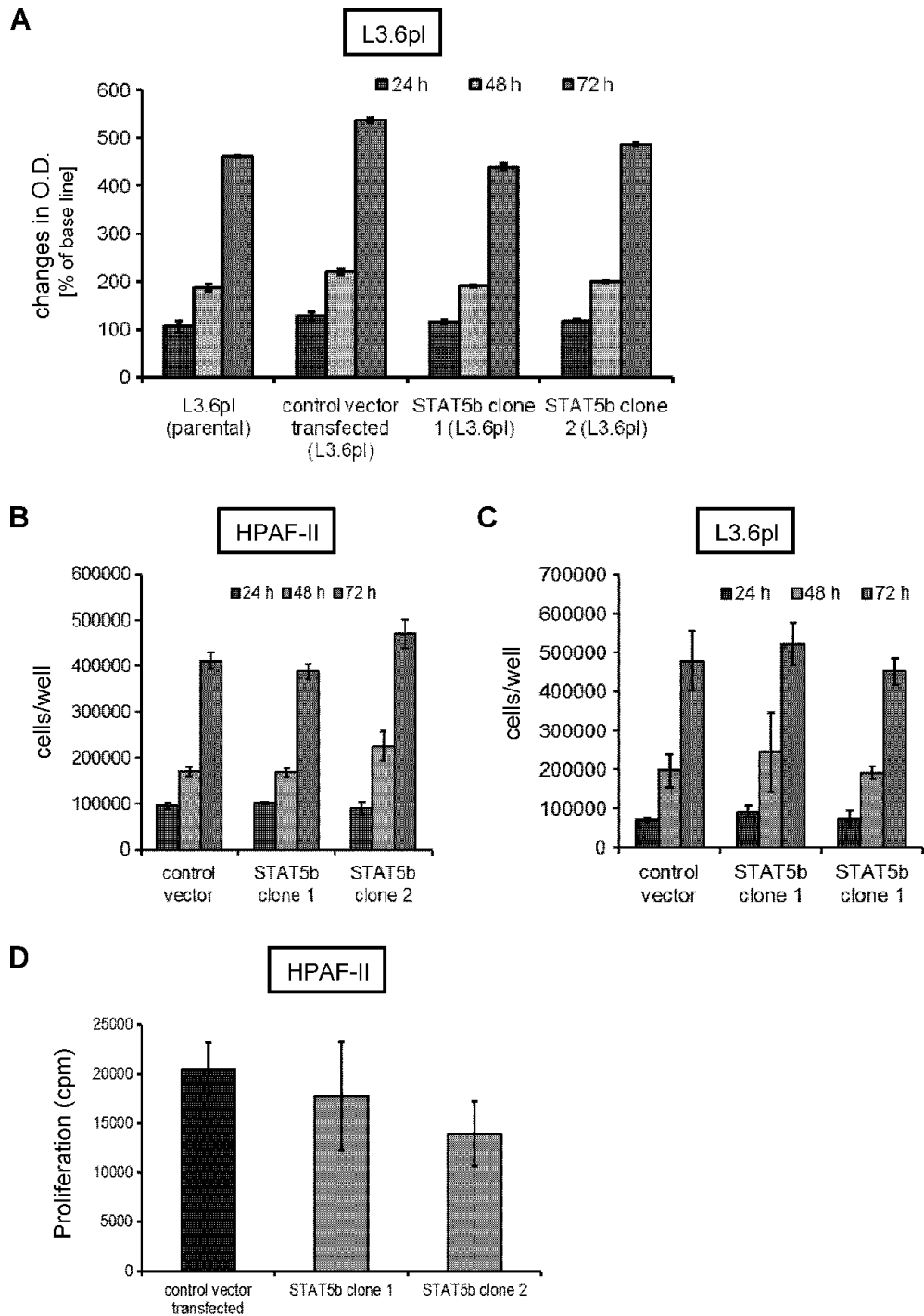
Figure W2. Effects of STAT5b knockdown on growth of pancreatic cancer cell lines *in vitro*. (A) Knockdown of STAT5b in L3.6pl has no effects on the growth of tumor cells *in vitro*, as determined by MTT assay. (B and C) No inhibition of growth was observed in cell count assays up to 72 hours for HPAF-II and L3.6pl cells. (D) [^{3}H]thymidine incorporation assays did not show a significant inhibition of tumor cell proliferation up to 96 hours for HPAF-II cells with stable STAT5b knockdown compared to controls. Bars, SEM.
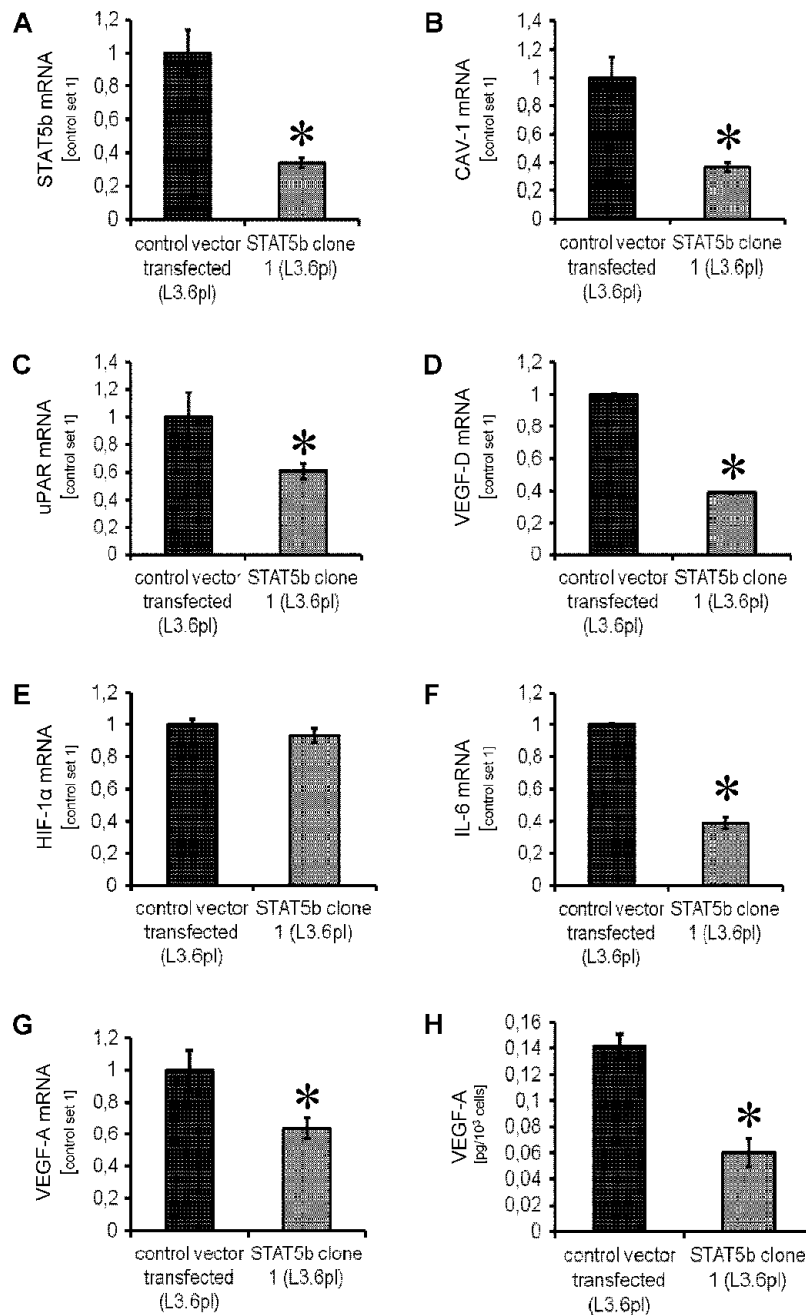
Figure W3. Targeting STAT5b affects metastasis and angiogenesis mediators in L3.6pl human pancreatic cancer cells. (A) shRNA-mediated knockdown of STAT5b was verified by PCR (L3.6pl cells). (B–D) Stable shRNA-mediated knockdown of STAT5b significantly reduces mRNA expression of metastatic factors CAV-1, uPAR, and VEGF-D in L3.6pl pancreatic cancer cells (*$P < .05$). (E) No effects of STAT5b on HIF-1α mRNA expression were observed in L3.6pl pancreatic cancer cells. (F) Inhibition of STAT5b leads to a significant IL-6 mRNA expression reduction in L3.6pl cells (*$P < .05$). (G) VEGF-A mRNA was significantly reduced in L3.6pl STAT5b knockdown clones (*$P < .05$). (H) Decreased VEGF-A secretion was confirmed at a protein level (ELISA) in L3.6pl cells *in vitro* (*$P < .05$). Bars, SEM.
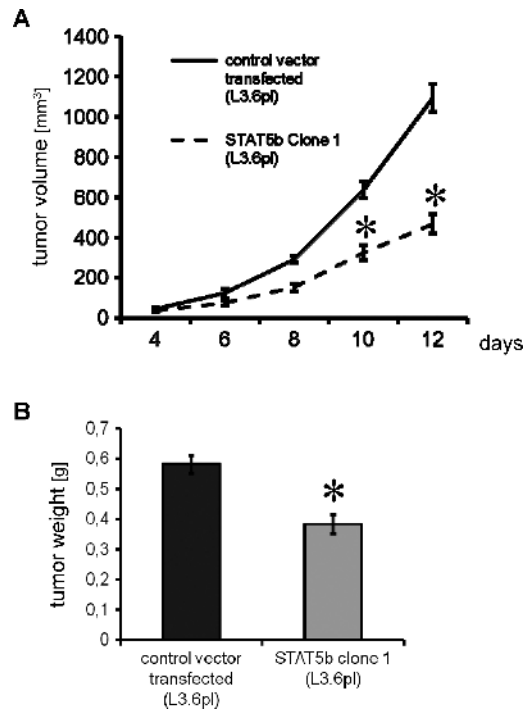
A

B

Figure W4. Subcutaneous L3.6pl pancreatic cancer tumor model growth is inhibited on STAT5b knockdown. (A) Stable shRNA-mediated knockdown of STAT5b leads to a significant inhibition of subcutaneous tumor growth (*$P < .05$). (B) Growth inhibition was reflected by final tumor weight (*$P < .05$).