Supplementary Figure 1. KLF6 binds to and activates the ATF3 promoter in PC-3 cells. (A) PC-3 cells were cotransfected with reporter plasmids and pCMV-Tag2-KLF6. Cells were incubated in media containing 0.1% serum after transfection. Cell extracts were assayed for luciferase activity. The experiment has been repeated three times. (B) ChIP assay was performed with KLF-6-transfected PC-3 cells using anti-KLF6 antibody. Promoter regions RND (-1418 to -1219) and KB (-370 to -120) were amplified by PCR.

Supplementary Figure 2. KLF6 splicing variants also up-regulate ATF3 and induce apoptosis. (A) Overexpression of KLF6-SV2 up-regulated ATF3 protein in PC-3 cells. Cells were transfected with empty pCMV-Tag2 or pCMV-Tag2-KLF6-SV2 vectors. Western blotting was done with anti-Flag and anti-ATF3 antibodies. (B) KLF6-SV2 induced apoptosis in PC-3 cells. Cells were transfected with empty pCMV-Tag2 or pCMV-Tag2-KLF6-SV2 vectors. Apoptosis was analyzed using the Cell Death Detection Elisa PLUS kit. The average results from three independent experiments were shown. (C) Knocking-down of KLF6-SV1 by siRNA. KLF6-SV1 targeting siRNA and negative control siRNA were transfected into PC-3 cells. Protein samples were collected at 48h after siRNA transfection. Western blot was performed with anti-KLF6 antibody. (D) KLF6-SV1 siRNA blocked STS-induced ATF3 expression and apoptosis. PC-3 cells were transfected with KLF6-SV1 targeting siRNA or negative control siRNA. At 24h after siRNA transfection, cells were treated with 1 µM STS for additional 8h. ATF3 protein level was determined by western blotting. Apoptosis was analyzed using the Cell Death Detection Elisa PLUS kit. The average result from three independent experiments was shown.



