



Figure S8. Modulation of mir93 level in SUM159 cells altered cell invasion in vitro and knockdown increases tumor growth in vivo

SUM159 cells were infected with no virus (non-infection), DsRed control lentivirus (SUM159-Neg-DsRed) or mirZip antisense mir93 lentivirus (SUM159-mirZip93-DsRed). **A.** microRNA RT-PCR demonstrated SUM159-mirZip93-DsRed reduced mir93 expression by more than 90%. **B.** SUM159-non-infection, SUM159-Neg-DsRed, SUM159-mirZip93-DsRed cells were grown in T75 flasks and Aldefluor assay was utilized to measure the percentage of ALDH⁺ cells. **C.** Serial dilutions of cells were implanted in the 4th fatpads of NOD/SCID mice. SUM159-mirZip93-DsRed cells initiated tumors sooner and accelerated growth compared to equivalent number of control cells. **D.** Cells were isolated from the tumors in **C** and Aldefluor assay was utilized to measure the percentage of ALDH⁺ cells. **E.** Invasive capacity was assessed by a Matrigel invasion assay using serum as attractant. pTRIPZ-SUM159-mir93 cells are less invasive than the control cells in vitro accesses at 27 hours. **F.** The invasion was assessed by a Matrigel invasion assay using serum as attractant. SUM159-mirZip93-DsRed cells are more invasive than the control cells in vitro accesses at 27 hours.

p<0.05; Error bars represent mean ± STDEV. The colored “” on the side of the tumor growth curve represents the tumor growth is significantly different between Control group and the group with the same colored curve.