



Supplemental Figure 4. Cycling AIF KO cells inactivated cell cycle arrest and P21-mediated senescence by diminishing mitochondrial mass and mitochondrial ROS generation. (A) Mitochondrial mass of senescent AIF- γ MEFs (D16) and cycling AIF KO cells assessed in a flow cytometer by Mitotracker Green labeling (n = 5). (B) PGC1 α mRNA levels determined by qPCR in senescent AIF- γ MEFs (D16) and cycling AIF KO cells (n = 6). The 18S mRNA expression was used to normalize data. The results were graphed as a ratio relative to D16 cells (mean of data set at 1.0). (C) Mitochondrial ROS levels recorded by flow cytometry in senescent AIF- γ MEFs (D16) and cycling AIF KO cells (n = 7). Data were obtained in 10,000 cells and expressed as mean fluorescence intensity (MFI). (D) Representative immunoblot of senescent AIF- γ MEFs (D16) and cycling AIF KO cells revealing the cell cycle inhibitor P21. Equal cellular loading was confirmed by β -Actin probing (n = 3 experiments with similar results). (E) Representative immunoblot of senescent AIF- γ MEFs (D16) and cycling AIF KO cells revealing the levels of pRb phosphorylation. Equal cellular loading was confirmed by β -Actin probing (n = 3 independent experiments with similar results). Statistical significance was calculated by Mann Whitney (A) or student t (B, C) tests. Bars represent mean \pm SEM.