



**Figure S1. p16<sup>INK4A</sup> Cys72 is dispensable for its role in cell cycle arrest**

(A) Cell-cycle profiling of COLO-829 cells expressing doxycycline inducible pINDUCER20-p16<sup>INK4A</sup> wildtype or p16<sup>INK4A</sup>C72A as well as the FUCCI cell cycle indicator system. Cells were trapped overnight in mitosis using Nocodazole to make G1/G0-arrested cells more obvious from those that were still cycling. The CDK4/6 inhibitor LEE011 was added to estimate to what extent CDK4/6 inhibition can induce cell cycle arrest in this cell line. The C72A mutation leaves the cell-cycle inhibitor function of p16<sup>INK4A</sup> intact. (B) The graph shows the pooled results for the percentage of cells in G1/G0 phase of the cell cycle quantified from two experiments with at two or three replicates each. We conclude that p16<sup>INK4A</sup>C72A is still able to induce a cell cycle arrest. (C) The FACS plots and histograms show typical results for each of the conditions.