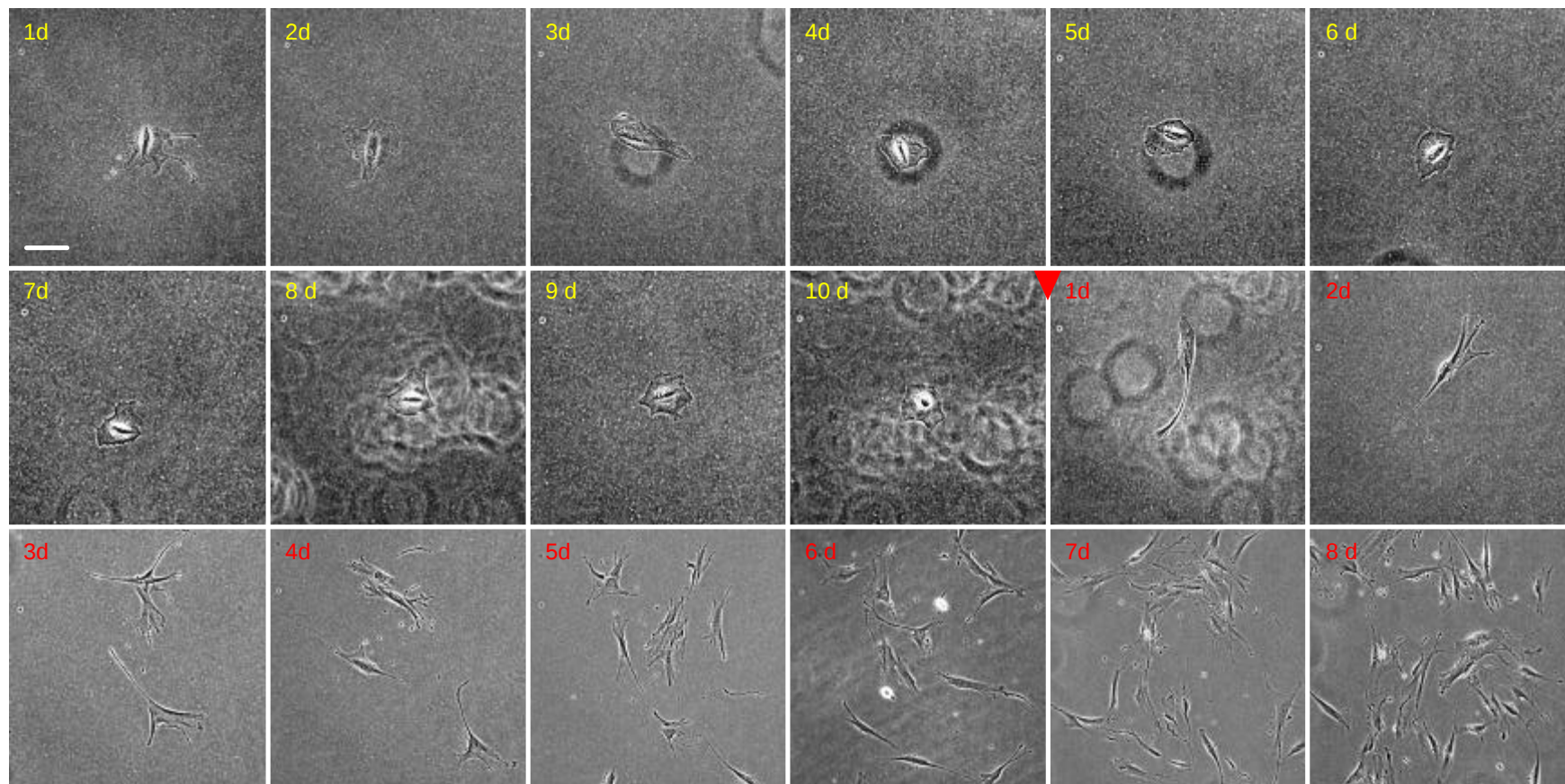
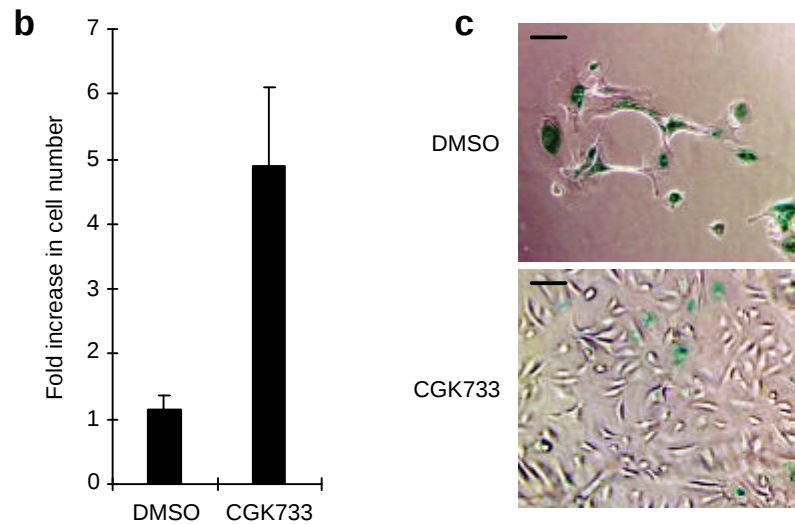


a





Supplementary Figure 2. Reversal of replicative senescence of BJ and HMEC cells by CGK733. **(a)** Time-lapse monitoring of the reversal of replicative senescence by CGK733 at a single cell level. A senescent BJ cell was imaged by phase-contrast microscopy at each day for 10 days. This senescent cell exhibited enlarged and flattened morphology, and did not divide during this period of time. Then, this cell was treated with 2 μ M CGK733 (red arrowhead) and images were captured at each day for additional 8 days. After CGK733 treatment, rapid induction of proliferation along with dramatic morphological changes of the cell was observed. Scale bar, 200 μ m. **(b,c)** Reversal of replicative senescence in HMECs by CGK733. Growth kinetics **(b)** and SA- β -gal activity **(c)** of HMECs treated with CGK733. HMECs were cultured until replicative senescence, and these cells were incubated with or without 250 nM CGK733 for 10 days. In **b**, the fold increase in cell number over 10 days after CGK733 treatment is presented. The results shown are the average of three experiments, and error bars indicate standard deviations. Scale bars, 100 μ m.