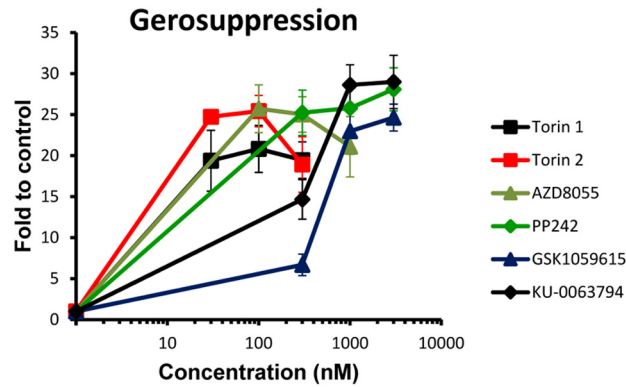
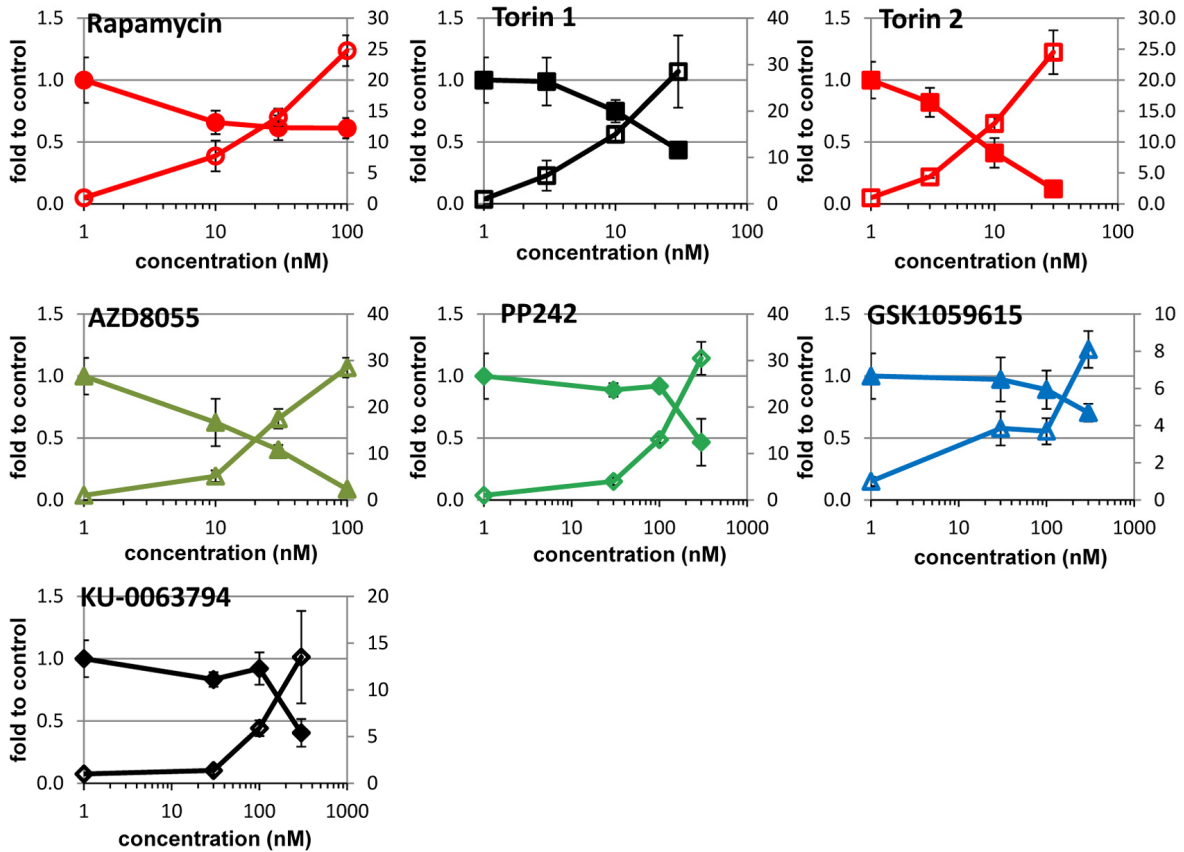


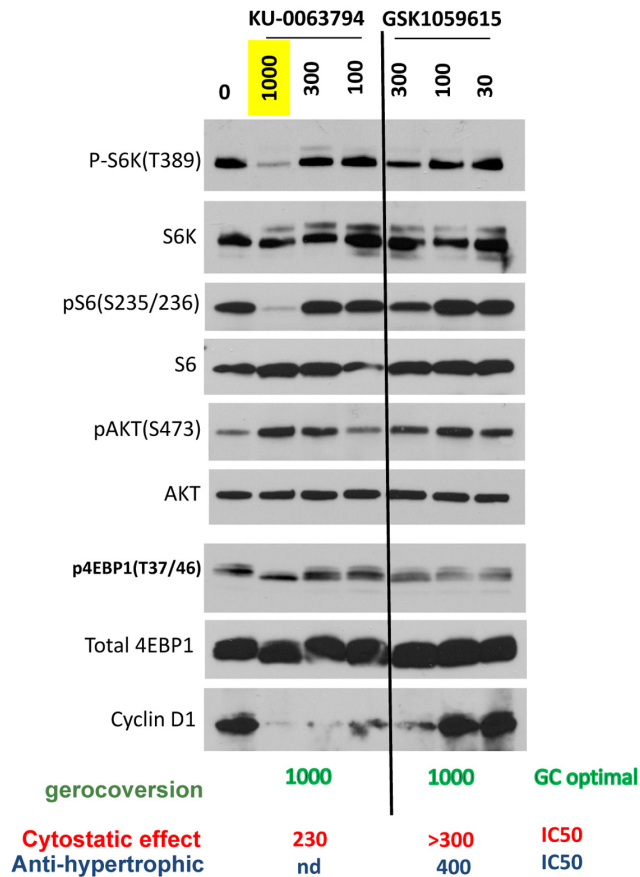
SUPPLEMENTARY MATERIAL



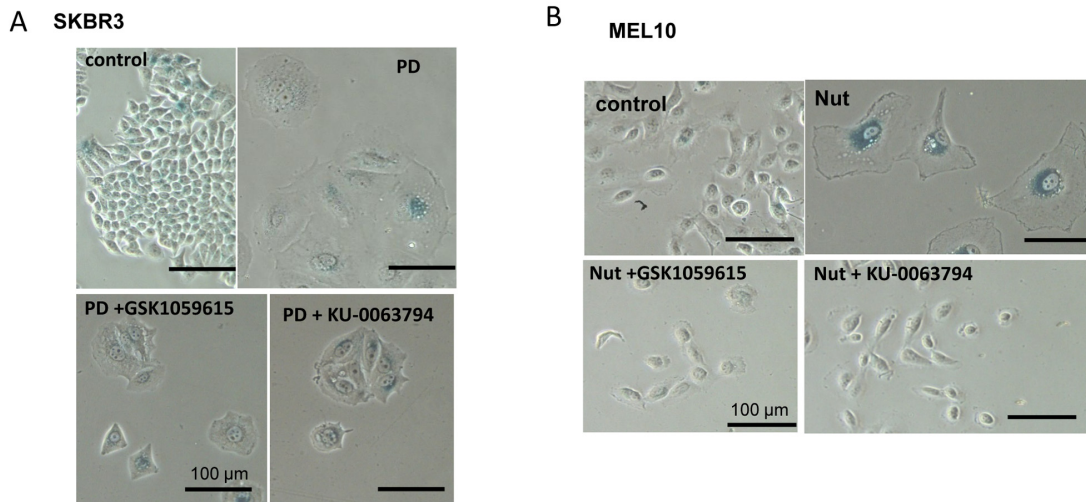
**Supplementary Figure S1. Extended concentration ranges of TOR inhibitors to determine maximal optimal dose for gerosuppression in HT-p21 cellular model of senescence.** HT-p21 cells were treated with IPTG and different concentrations of indicated TOR inhibitors. After 4 day-treatment, drugs were washed out and cells were incubated in drug-free medium For 7 days and counted. Data are mean ± SD from triplicate wells.



**Supplementary Figure S2. Gerosuppressive effect mirrors cytosstatic effect.** of TOR inhibitors. HT-p21 cells were treated with serial dilutions of indicated drugs as described in Figure 1 A (for cytosstatic effect, shown as filled markers) and in Fig. 1C (for gerosuppressive effect, shown as empty markers).



**Supplementary Figure S3.** HT-p21 cells were treated with range of concentrations of KU-0063794 and GSK1059615 for 24 h and lysed. Data present Immunoblotting with indicated antibodies.



**Supplementary Figure S4.** Effect of GSK1059615 and KU-0063794 on senescent morphology of SKBR3 (A) and MEL10 (B) cells. SKBR3 and MEL10 cells were induced to senescence by treatment with 10  $\mu$ M PD0332991 (PD) or 2.5  $\mu$ M nutlin 3a (Nut), respectively. Co-treatment with either 1000 nM of GSK1059615 or KU-0063794 prevent senescent morphology in these cells.