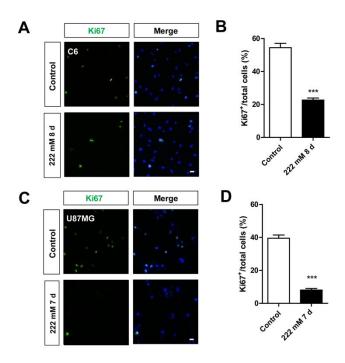
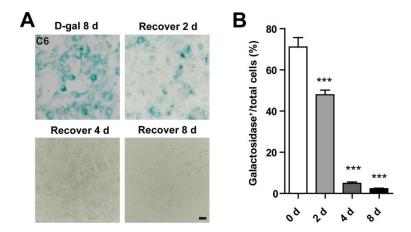
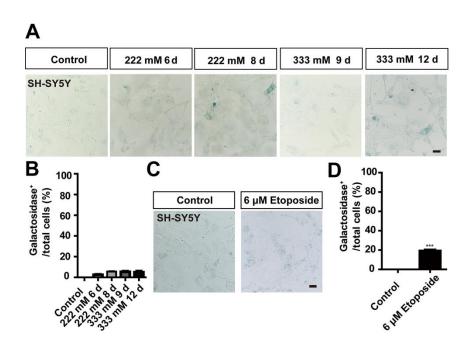
## **SUPPLEMENTARY FIGURES**



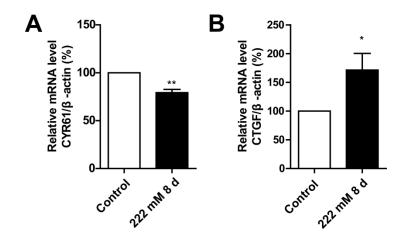
Supplementary Figure 1. D-gal inhibited the proliferation of C6 and U87MG cells. (A) Immunostaining of Ki67 (green) in control and senescent C6 cells (treated with 222 mM D-gal for 8 d). (B) Quantitative analysis of the percentage of Ki67<sup>+</sup> cells over total cells as shown in (A) (n=15). (C) Immunostaining of Ki67 (green) in control and senescent U87MG cells (treated with 222 mM D-gal for 7 d). (D) Quantitative analysis of the percentage of Ki67<sup>+</sup> cells over total cells as shown in (C) (n=15). Scale bars, 20  $\mu$ m. Data shown are mean  $\pm$  s.e.m. \*\*\*\* P < 0.001.



**Supplementary Figure 2. D-gal-induced C6 cell senescence can be reversed.** (A) Representative images showing β-galactosidase staining in senescent C6 cells (treated with D-gal at 222 mM for 8 d) and senescent C6 cells after removal of D-gal for 2, 4, 8 d. (B) Quantification of the percentage of β-galactosidase<sup> $^+$ </sup> C6 cells over total cells as shown in (A) (n=15). Scale bar, 20 μm. Data shown are mean  $\pm$  s.e.m. \*\*\*\*P < 0.001.



Supplementary Figure 3. D-gal failed to induce the senescence of SH-SY5Y cells. (A) Representative images showing β-galactosidase staining in control SH-SY5Y cells and SH-SY5Y cells treated with D-gal at 222 mM for 6 and 8 d, or 333 mM for 9 and 12 d. (B) Quantification of the percentage of β-galactosidase<sup>+</sup> SH-SY5Y cells over total cells as shown in (A) (n=15). (C) Representative images of β-galactosidase staining in control SH-SY5Y cells and SH-SY5Y cells treated with etoposide at 6 μM for 1 d, and recovered for 4 d. (D) Quantification of the percentage of β-galactosidase<sup>+</sup> SH-SY5Y cells over total cells as shown in (C) (n=15). Scale bars, 20 μm. Data shown are mean  $\pm$  s.e.m. \*\*\*\*P < 0.001.



Supplementary Figure 4. D-gal treatment altered the expression of other YAP-targeted genes. (A, B) qPCR results showing the mRNA level of CYR61 (A, n=4) and CTGF (B, n=7) in control and senescent C6 cells (treated with 222 mM D-gal for 8 d). Data shown are mean  $\pm$  s.e.m.  $^*P < 0.05$ ,  $^{**}P < 0.01$ .