



**Supplementary Figure S1. The morphology and basic function of liver between young and aged mice.** (A) The photos of young (2m) and aged (24m) mice liver. (B) The whole liver and the body were weighted. The ratio of liver and body weight was calculated (n=3). (C) Serum alanine aminotransferase (ALT) and total bilirubin (TB) of young (2m) and aged (24m) mice was tested by ELISA (n=6, \*  $p < 0.05$ ). (D) Quantitative Real-time PCR showed the expression levels of *Trp53*, *Cdkn1a* and *Cdkn2a* between 2m and 24m liver tissues (n=9, \*\*\*  $p < 0.001$ ). (E) Western blot showed the expression of p53, p21 and p16 in 2m, 6m, 12m, 18m and 24m liver tissues.