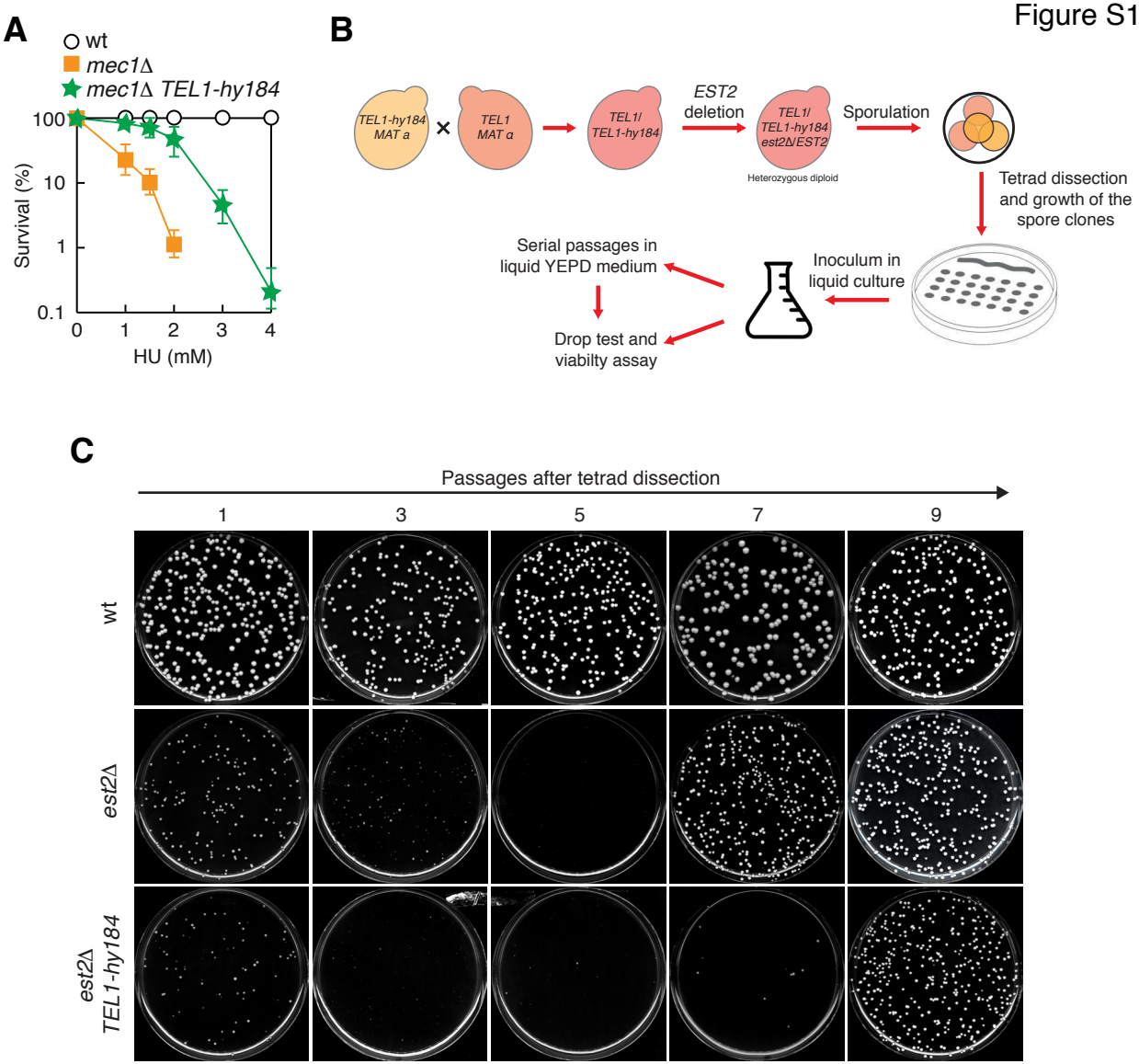


**Figure S1. Tel1-hy184 anticipates senescence in telomerase-negative cells**

(A) The same number of cells with the indicated genotypes were plated on YEPD plates with or without different concentrations of hydroxyurea. Colony forming units were determined after 2-3 days of growth at 30°C. (B) Schematic representation of a senescence experiment. After sporulation of heterozygous diploids where one copy of the *EST2* (or *TLC1*) gene was deleted, meiotic tetrads were dissected on YEPD plates, which were then incubated at 30°C for 48 hours. Spore colonies were genotyped and inoculated in YEPD medium directly from the microdissection plate at the concentration of 5x10 cells/mL. Every 24 hours, cell cultures were diluted back to 5x10 cells/mL in YEPD. Determination of cell density, as well as drop test and viability assay were performed during serial passages in liquid YEPD medium. (C) 300 cells with the indicated genotypes were plated onto YEPD plates every day after the inoculum in liquid culture of spore clones derived from an *EST2*/*est2Δ TEL1*/*TEL1-hy184* diploid. Plates were incubated 2 days at 30°C to determine the colony-forming units.