Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: Live-imaging of RFP-tagged H2B expressing A549 cells undergoing senescence. Imaging was begun ~24 hours after lentiviral infection with shGFP constructs. These control cells show proper mitosis. Time is shown in hr:min.

File name: Supplementary Movie 2

Description: Live-imaging of RFP-tagged H2B expressing A549 cells. Imaging was begun $^{\sim}24$ hours after lentiviral infection of the shSETD1A construct. SETD1A-KD cells show mitotic defects preceding the senescence phenotype. Time is shown in hr:min.