



**Supplementary Figure S3** Chromosome missegregation and abnormal mitotic exit in Trrap-deficient cells. (A) Establishment of "conditional" Trrap-deficient cells that express H2B-GFP fusion protein. Examples of a mitotic (M) and an interphase (I) cell expressing H2B-GFP (green) are shown. To verify chromatin localization of H2B-GFP, cells were counterstained with Hoechst 342 dye (blue). (B) PCR analysis of Trrap deletion 48 h after OHT treatment. Two independent stable clones coexpressing H2B-GFP and Cre-ER (TA-5-6 and TA-5-8) are shown. (C) Real-time microscopy of mitotic progression in cells lacking Trrap. TA-5-8 cells were grown in the presence or absence of OHT for 72 h and subjected to time-lapse fluorescence microscopy. Arrowheads point to metaphase alignment. Arrows point to micronucleus (middle column) and chromatin 'bridge' (right column). Positive and negative values of individual frames indicate times (in minutes) before (-) and after (+) metaphase alignment. (D) Quantitative summary of Trrap-containing and Trrap-deficient cells exhibiting aberrant chromosome segregation. Numerical values represent number of normal or aberrant mitosis detected per total number of mitosis analyzed.