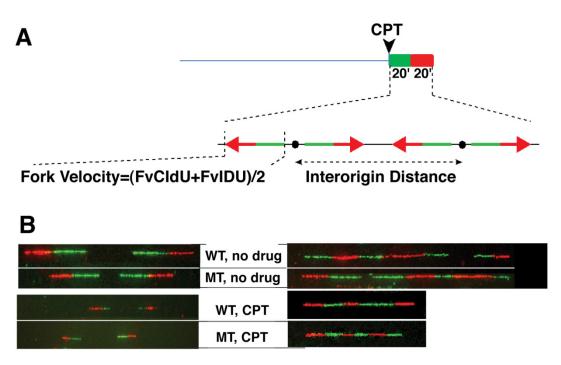
Supplementary Fig. 1. SIRT1 modulates velocity and inter-origin distance of DNA

replication. (A) Experimental protocol for measuring fork velocity and inter-origin distance by the DNA combing assay after CldU and IdU labeling. (B) Representative images of fluorescently labeled DNA fibers from SIRT1-WT and SIRT1-MT MEFs with/without CPT treatment.



Supplementary Fig. 2. **MS/MS spectra for acetylated peptides of TOPBP1.** Acetylation of (A) Lys1253, (B) Lys1398, (C) Lys1445 and was observed on TopBP1 immunoprecipitated from cells overexpressing SIRT1. Lys1445 acetylation was also observed on protein from cells following over-expression of SIRT1-HY. Acetylation of Lys482 (D) was observed on TopBP1 immuno-precipitated from cells following TSA treatment.

