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## Supplementary information

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# Mitotic clustering of pulverized chromosomes from micronuclei

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## SUPPLEMENTARY INFORMATION GUIDE

### Mitotic clustering of pulverized chromosomes from micronuclei

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**Supplementary Figure 1.** Raw, unprocessed images of western blots reported in this study.

**Supplementary Table 1.** List of balanced chromothripsis events disrupting cancer driver genes in the PCAWG cohort.

**Supplementary Table 2.** List of oligonucleotide sequences used in this study.

**Supplementary Video 1.** Live-cell imaging of dCas9-SunTag-labeled Y chromosome mis-segregating into a micronucleus. Y chromosome DYZ1 repeats are labeled with dCas9-SunTag in green; chromatin is labeled with H2B-mCherry in red. Movie shown at 15 min intervals per second.

**Supplementary Video 2.** Live-cell imaging of dCas9-SunTag-labeled Y chromosome in micronuclei remaining clustered throughout mitosis. Y chromosome DYZ1 repeats are labeled with dCas9-SunTag in green; chromatin is labeled with H2B-mCherry in red. Movie shown at 30 min intervals per second.

**Supplementary Video 3.** Live-cell imaging of CIP2A-depleted cell exhibiting dispersal of dCas9-SunTag signals upon mitotic entry. Y chromosome DYZ1 repeats are labeled with dCas9-SunTag in green; chromatin is labeled with H2B-mCherry in red. Movie shown at 15 min intervals per second.

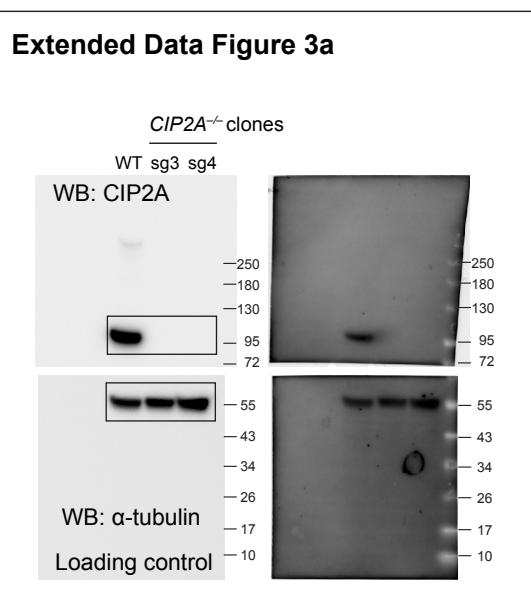
**Supplementary Video 4.** Live-cell imaging of micronucleated, HaloTag-labeled CIP2A puncta remaining clustered throughout mitosis. CIP2A is shown in green; chromatin is labeled with H2B-mCherry in red. Movie shown at 15 min intervals per second.

### Source Data for Figures 1-4 and Extended Data Figures 1-9

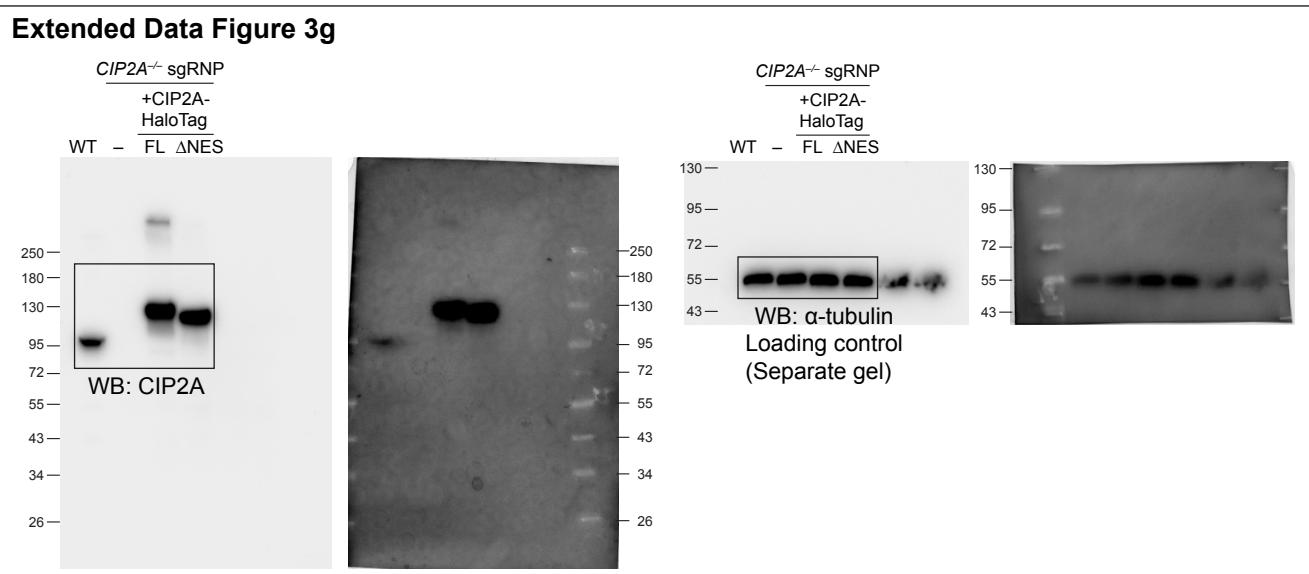
*Supplementary Tables, Supplementary Videos, and Source Data are provided as separate files*

# Supplementary Figure 1

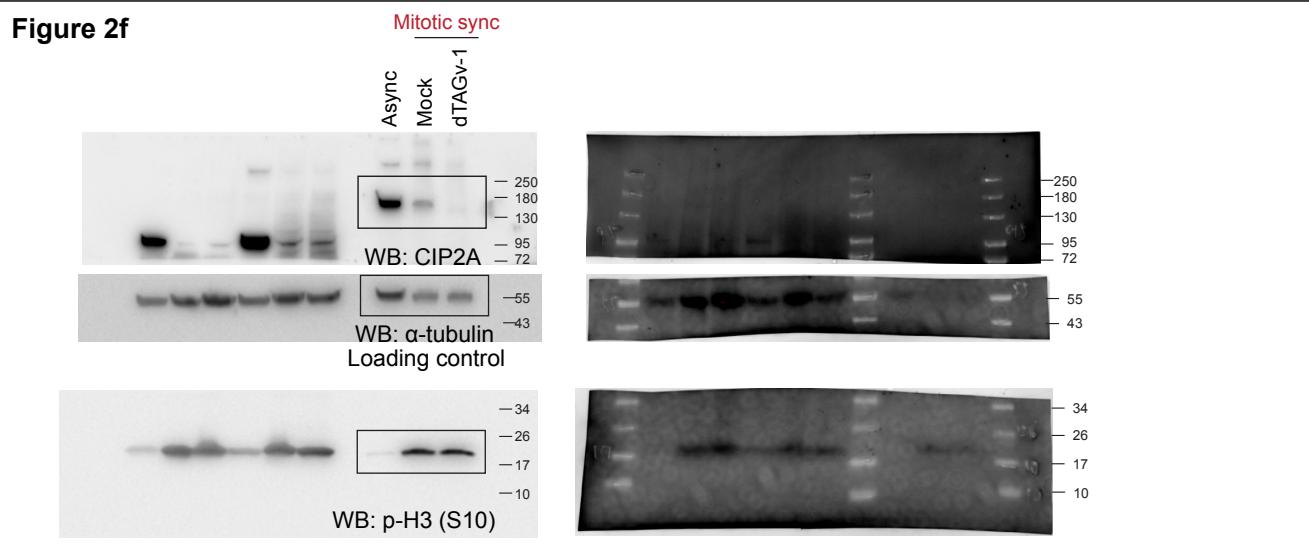
## Extended Data Figure 3a



## Extended Data Figure 3g

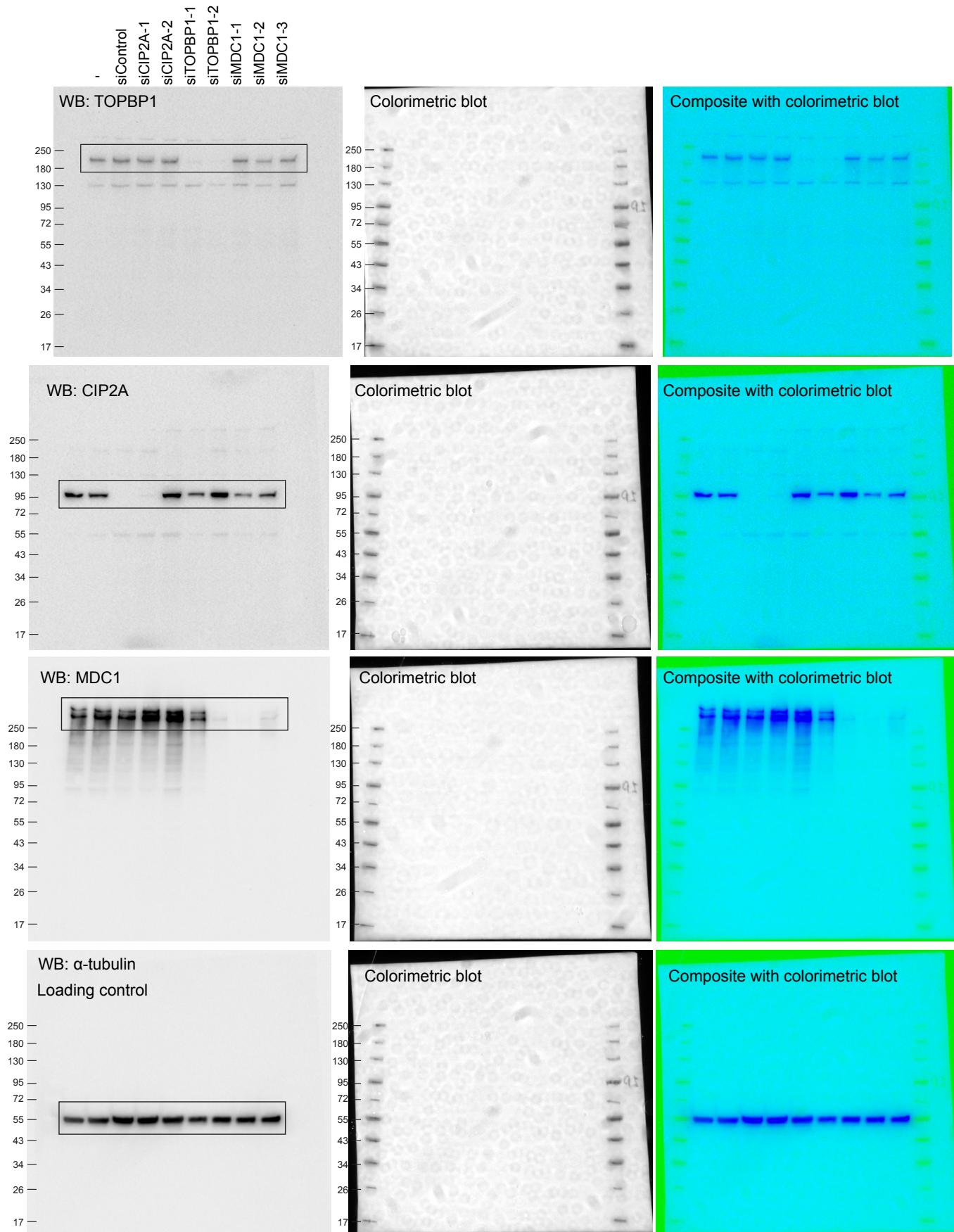


## Figure 2f



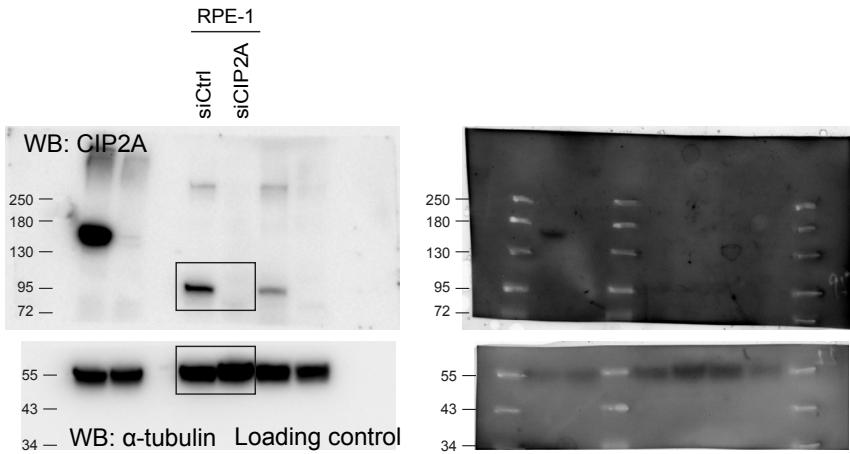
## Supplementary Figure 1 (cont.)

### Extended Data Figure 4b



## Supplementary Figure 1 (cont.)

### Extended Data Figure 5a



### Extended Data Figure 5h

