Supplementary Text

Disqualification of GSG2 (Haspin) as a Cellular Target of CA

GSG2 (Haspin) phosphorylates histone H3T3 during mitosis and its depletion results in improper metaphase chromosome alignment and mitotic arrest[54]. In follow-up testing, CA only inhibited GSG2 *in vitro* with an IC_{50} of 130 nM, ~25-fold higher than for CDK8/CCNC, did not bind GSG2 in MOLM-14 cell lysate at up to 2,500 nM (Extended Data Fig. 2g), and did not arrest cells in G2/M (Extended Data Fig. 4e). Together, these results indicate that CA does not inhibit GSG2 in cells at the doses used in this study.

Reference

54. Higgins, J. M. G. Haspin: a newly discovered regulator of mitotic chromosome behavior. *Chromosoma* **119,** 137–147 (2009).