

Supplementray Table 7: Key Resource Table. List of reagents, data, and software used in this study with source and identifier.

Human primers		
<i>CDK1</i>	agggcagagtgggtgttagg	gcgctacctctgcagagtgg
<i>CENPE</i>	gcgggctcaggcaatggaaa	agaggtcaccagcatccgtgt
<i>CENPK</i>	agaagtccggggctggcaag	tggcaccagatcttgaatctcca
<i>CENPN</i>	cgaattgcctggggaacacagt	tggaggaggacgtgaaggcg
<i>CENPU</i>	ggttgtcggcctggactcc	cgtccgaacagccaatccg
<i>DSN1</i>	actgaggcgggtggattgct	gcctcaacctcctgggctca
<i>PLK4</i>	ccaggcctcggaaggtgtca	ctggcctgggttctccgat
<i>PSMA3</i>	gcccttctctcgcacctga	cctgcttctcgcggtccg
<i>PSMC6</i>	accgcttgaggccaggagtt	tcctcatgcctggctctggc
<i>ZW10</i>	cggcgggtggaggagatcaa	aagatcccggcgacctcac
<i>WEE1</i>	tcggccttcaagagccga	ctctctctccacagagtcgc
<i>CCNE2</i>	ggtagctggtctggcgaggt	ggattccgtctggctgggct
<i>ACTINB</i>	gtcttccctccatcgtggg	cctctcttctctgggcctc
<i>ATAD2</i>	cgcctggagctggatctctc	aaagcacgtgtccgggtgta
<i>P53</i>	tatgagccgcctgaggttg	ggcacaacacgcacctcaa
<i>P21</i>	gggatgagttgggaggagcg	gaagatcagccggcggttgg
shRNAs	Clone ID	
<i>ATAD2</i> shRNA#1	TRCN0000158771	
<i>ATAD2</i> shRNA#2	TRCN0000161812	
Recombinant DNA		
piggyBac GFP-Luc	Ding et al., 2005	N/A
Act-P-Base	Ding et al., 2005	N/A
Antibodies	Company	IDENTIFIER
PARP	Cell signaling	Cat# 9542S RRID:AB_2160739
Actin	Cell signaling	Cat# 8457 RRID:AB_10950489
ATAD2	Abcam	Cat# Ab244431
CENP-E	Cell signaling	Cat# 96351S RRID:AB_2800260
p53	Cell signaling	Cat#48818 RRID:AB_2713958
p21	Cell signaling	Cat #2947 RRID:AB_823586
CDC2/CDK1	Cell signaling	Cat# #28439 RRID:AB_2798959
CENPK	Invitrogen	Cat# PA5-97579 RRID:AB_2812194
CENPN	Invitrogen	Cat# PA5-100721 RRID:AB_2850225

CENPU	Invitrogen	Cat# PA5-100725 RRID:AB_2850229
DSN1	Invitrogen	Cat# PA5-51742 RRID:AB_2640805
PLK4	Cell signaling	Cat# 71033
PSMA3	Cell signaling	Cat# 2456S RRID:AB_2171417
PSMA6	Invitrogen	Cat# PA5-30134 RRID:AB_2547608
ZW10	Invitrogen	Cat# PA5-62357 RRID:AB_2650417
WEE1	Cell signaling	Cat# 13084T RRID:AB_2713924
CCNE2	Cell signaling	Cat# 4132T RRID:AB_2071197
Inhibitor	Concentrations	Source
BAY850	0.2μM, 1μM, 5μM	selleckchem
GSK923295	10nM,15nM, 25nM	selleckchem
Commercial assays and kits		
Click-iT™ Plus EdU Flow Cytometry Assay Kits	Invitrogen	Cat#C10632
FITC-Annexin V Apoptosis Detection Kit	BD Pharmingen	Cat# 556547
CUT&RUN Assay Kit	Cell Signaling Technology	Cat# 86652
BioCoat Growth Factor Reduced Matrigel Invasion Chambers	Corning	Cat #354483
Deposited data		
RNA-Seq performed with PA-1 cells treated with BAY-850	This paper	GEO: GSE192673
RNA-Seq performed with SK-OV3 cells treated with BAY-850	This paper	GEO: GSE192673
Software and Algorithms		
Prism 9.0	GraphPad	www.graphpad.com/scientific software/prism
ImageJ	https://imagej.nih.gov/ij	N/A
Cell Lines		
PA1	ATCC	ATCC CRL-1572
SKOV3	ATCC	ATCC HTB-77
HEK293T	ATCC	ATCC CRL-3216
Experimental Models: Organisms/Strains		
Mouse: NSG	Jackson Laboratory	Stock No. 005557
Chemicals, Peptides, and Recombinant Proteins		

DMEM	Sigma-Aldrich	Cat# D5796
RPMI	Sigma-Aldrich	Cat# R8758
Fetal Bovine Serum	GIBCO	Cat# 10437-028
Trypsin-EDTA	GIBCO	Cat# 25200-056
Penicillin-Streptomycin	GIBCO	Cat# 15140-122
Effectene Transfection Reagent	QIAGEN	Cat# 301427
VECTASHIELD Hardset Antifade Mounting Medium with DAPI	Vector Laboratories	Cat# H-1500
XenoLight D-Luciferin - K ⁺ Salt Bioluminescent Substrate	Perkin Elmer	Cat# 122799
Agarose, Low gelling	Sigma-Aldrich	Cat# A9045