

Table S1 Reagents and antibodies

Table S2 The sequences of primers in this study

Table S3 The drugs from the FDA-approved drug library

Table S4 Phosphorylated proteomics sequencing differentially expressed statistics

Table S1. Reagents and antibodies

Name	Supplier	Cat No
Dronedarone	Shanghai Cheng Shao Biotechnology	C806002
CDK4 Antibody	Cell Signaling Technology	#12790
CDK6 Antibody	Abcam	Ab124821
RB1	Abcam	Ab181616
p-RB1S807	Abcam	Ab184796
p-RB1S811	Abcam	Ab109399
p-RB1T826	Abcam	Ab133446
β-Tubulin	SUNGENE biotech	KM9003
RB1 Fusion Protein	Proteintech	Ag11211

Table S2. The sequences of primers in this study

Primers	Sequence (5' to 3')
hCDK4-304R-HindIII(pet28a)	GCGAAGCTTTCACTCCGGATTACCTTCATC
hCDK4-1F-BamHI(pet28a)	GCGGGATCCATGGCTACCTCTCGATATGAG
hCDK6-327R-HindIII(pet28a)	GCGAAGCTTTCAGGCTGTATTCAGCTCCGA
hCDK6-1F-BamHI(pet28a)	GCGGGATCCATGGAGAAGGACGGCCTGTGC
hCDK4-sgRNA1-F	CACCGTACCTCTCGATATGAGCCAG
hCDK4-sgRNA1-R	AAACCTGGCTCATATCGAGAGGTAC
hCDK4-sgRNA2-F	CACCGAAATTGGTGTCTGGTGCCTAT
hCDK4-sgRNA2-R	AAACATAGGCACCGACACCAATTTC
hCDK4-sgRNA3-F	CACCGCACTCTTGAGGGCCACAAAG
hCDK4-sgRNA3-R	AAACCTTTGTGGCCCTCAAGAGTGC
hCDK4-sgRNA4-F	CACCGTGCCACATCCCGAACTGAC
hCDK4-sgRNA4-R	AAACGTCAGTTCGGGATGTGGCAC
hCDK4-sgRNA5-F	CACCGCTGATGCGCCAGTTTCTAAG
hCDK4-sgRNA5-R	AAACCTTAGAAACTGGCGCATCAGC
hCDK6-sgRNA1-F	CACCGATTCGTACTGCTGGTCAGCG
hCDK6-sgRNA1-R	AAACCGCTGACCAGCAGTACGAATC
hCDK6-sgRNA2-F	CACCGATGCGTGGCGGAGATCGGGG
hCDK6-sgRNA2-R	AAACCCCGATCTCCGCCACGCATC
hCDK6-sgRNA3-F	CACCGAAGGCCCGCGACTTGAAGAA
hCDK6-sgRNA3-R	AAACTTCTTCAAGTCGCGGGCCTTC
hCDK6-sgRNA4-F	CACCGATGATGTTTCAGCTTCTCCG
hCDK6-sgRNA4-R	AAACCGGAGAAGCTGAAACATCATC
hCDK6-sgRNA5-F	CACCGTCCAGCTACGCCACCCCG
hCDK6-sgRNA5-R	AAACCGGGGGTGGCGTAGCTGGAC

Table S3. The drugs from the FDA-approved drug library

Number	Name	CAS
1	Baclofen	1134-47-0
2	Sulfadimethoxine	122-11-2
3	Metronidazole	443-48-1
4	Dronedarone hydrochloride	141625-93-6
5	Naftidrofuryl (oxalate)	3200-06-4
6	Theophylline	58-55-9
7	Apramycin sulfate	65710-07-8
8	Glutathione	70-18-8
9	Dexamethasone	50-02-2
10	Fluvoxamine maleat	61718-82-9
11	Vitamin D2	50-14-6
12	Repaglinide	135062-02-1
13	Etomidate	33125-97-2
14	Carbenicillin disodium	4800-94-6
15	Zolmitriptan	139264-17-8
16	Chlorthalidone	77-36-1
17	Adapalene	106685-40-9
18	tolnaftate	2398-96-1
19	Sparfloxacin	110871-86-8
20	Valacyclovir hydrochloride	124832-27-5
21	Milrinone	78415-72-2
22	Minocycline hydrochloride	13614-98-7
23	Mifepristone	84371-65-3
24	Paromomycin Sulfate	1263-89-4
25	Penfluridol	26864-56-2
26	Loratadine	79794-75-5
27	Zucapsaicin	25775-90-0
28	Meclizine dihydrochloride	1104-22-9
29	2-Pyridinealdoxime methochloride	51-15-0
30	Ciclopirox Olamine	41621-49-2
31	DOXYLAMINE SUCCINATE	562-10-7
32	Imazalil	35554-44-0
33	Sarafloxacin hydrochloride	91296-87-6
34	2-Acetamido-5-nitrothiazole	140-40-9
35	Rasagiline	136236-51-6
36	Cephalothin Sodium	58-71-9
37	Cefprozil hydrate	121123-17-9
38	Penicillin V potassium	132-98-9
39	Beclometasone dipropionate	5534-09-8
40	Benfotiamine	22457-89-2
41	Trimethoprim	738-70-5
42	Nicergoline	27848-84-6

43	Clofoctol	37693-01-9
44	Nimesulide	51803-78-2
45	Oxiracetam	62613-82-5
46	Clorsulon	60200-06-8
47	Salbutamol	18559-94-9
48	doxycycline hydrochloride	10592-13-9
49	fenbendazole	43210-67-9
50	Clindamycin phosphate	24729-96-2
