

Supplementary Table S1 - Cell Viability Sildenafil (to 100%Control)

AsPc-1								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	123.02%	109.68%	130.43%				
	5µM	46.03%	41.94%	48.91%				
	10µM	8.73%	18.28%	14.13%				
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	107.30%	96.59%	87.61%				
	5µM	97.27%	70.69%	64.49%				
	10µM	33.40%	29.81%	46.14%				
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	60.52%	81.24%	66.02%				
	5µM	33.51%	34.12%	17.02%				
	10µM	9.05%	5.08%	11.51%				
BxPc-3								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	92.51%	77.69%	81.30%	67.61%			
	2.5µM			42.37%	46.95%			
	5µM	18.89%	14.74%	16.41%	14.55%			
	10µM	2.28%	6.77%	3.82%	5.63%			
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	105.64%	97.94%	107.29%	108.76%			
	2.5µM			97.84%	109.17%			
	5µM	74.78%	52.19%	52.91%	82.90%			
	10µM	34.82%	21.27%	20.03%	29.97%			
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	57.69%	56.46%	61.48%	69.95%			
	2.5µM			36.14%	44.12%			
	5µM	21.16%	9.15%	13.54%	22.89%			
	10µM	5.89%	0.88%	6.04%	9.35%			
Capan-1								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	84.72%	83.33%	82.35%				
	5µM	75.00%	83.67%	72.94%				
	10µM	36.11%	11.00%	39.12%				
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	91.96%	107.98%	90.58%				
	5µM	88.29%	84.11%	108.45%				
	10µM	37.10%	52.92%	58.55%				
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	86.16%	69.46%	103.43%				
	5µM	50.96%	47.88%	70.15%				
	10µM	22.84%	19.29%	36.38%				
Colo357								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	117.56%	119.66%	107.72%	94.35%			
	5µM	83.59%	98.31%	92.28%	91.13%			
	10µM	77.10%	62.36%	76.06%	73.39%			
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	115.06%	100.47%	98.38%	108.54%			
	5µM		81.90%	101.10%	112.36%			
	10µM	96.96%	64.77%	98.50%	89.06%			
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	99.45%	75.34%	89.23%				
	5µM	98.20%	74.78%	69.11%				
	10µM	59.55%	49.92%	58.24%				

Supplementary Table S1 - Cell Viability Silmitasertib (to 100%Control)

Panc-1								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	101.25%	126.09%	102.10%				
	5µM	98.75%	91.30%	79.00%				
	10µM	97.50%	38.04%	63.50%				
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	101.00%	96.52%	93.03%				
	5µM	82.96%	88.07%	80.29%				
	10µM	69.87%	66.91%	68.56%				
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd					
	Control	100.00%	100.00%	100.00%				
	1µM	101.80%	84.02%	104.34%				
	5µM	64.30%	72.88%	86.97%				
	10µM	39.21%	38.47%	49.95%				
PaTu8902								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	89.89%	98.00%	90.38%	96.96%			
	5µM	78.65%	87.00%	75.00%	72.37%			
	10µM	65.17%	54.00%	63.46%	59.87%			
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	94.73%	98.86%	88.65%	94.21%			
	5µM	75.65%	87.50%	70.59%	92.68%			
	10µM	85.61%	42.71%	26.71%	62.89%			
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th				
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	94.42%	98.41%	98.48%	87.80%			
	5µM	80.61%	94.43%	71.55%	59.09%			
	10µM	71.85%	84.57%	26.84%	47.32%			
PaTu8988S								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th				
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	130.51%	121.36%	108.70%	104.65%			
	5µM	83.05%	76.70%	75.00%	84.88%			
	10µM	71.19%	66.02%	67.39%	76.74%			
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th				
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	95.43%	119.78%	119.56%	98.74%			
	5µM	77.93%	91.42%	128.89%	106.14%			
	10µM	74.04%	88.90%	101.14%	97.78%			
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th				
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	89.29%	89.36%	94.85%	97.36%			
	5µM	78.42%	68.05%	85.24%	83.27%			
	10µM	56.41%	61.34%	44.47%	52.74%			
PaTu8988T								
Concentration	Proliferation					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th				
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	104.90%	92.66%	95.04%	94.01%			
	5µM	78.88%	82.04%	76.86%	79.21%			
	10µM	56.50%	61.75%	34.73%	44.63%			
Concentration	Metabolic activity					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th				
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	70.49%	102.13%	80.82%	117.84%			
	5µM	103.14%	87.52%	87.46%	113.44%			
	10µM	60.66%	69.11%	64.81%	67.84%			
Concentration	Biomass					Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th			
	Control	100.00%	100.00%	100.00%	100.00%			
	1µM	71.41%	77.94%	96.54%	81.91%			
	5µM	55.38%	64.06%	76.74%	79.34%			
	10µM	32.96%	58.63%	68.36%	36.54%			

Supplementary Table S1 - Cell Viability Silmitasertib (to 100%Control)

SU.86.86						
Proliferation						
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
1µM	97.93%	104.05%	80.38%	94.12%	12.29%	0.73
5µM	72.41%	75.00%	61.39%	69.60%	7.23%	0.005
10µM	46.90%	44.59%	31.01%	40.83%	8.59%	<0.001
Metabolic activity						
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
1µM	90.06%	101.06%	98.64%	96.59%	5.78%	>0.99
5µM	81.88%	72.17%	58.51%	70.85%	11.74%	0.04
10µM	71.87%	47.80%	32.30%	50.66%	19.94%	0.002
Biomass						
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
1µM	101.36%	94.56%	93.21%	96.38%	4.37%	0.96
5µM	78.27%	72.59%	53.28%	68.05%	13.10%	0.03
10µM	53.20%	19.43%	21.03%	31.22%	19.05%	<0.001

T3M4							
Proliferation							
Concentration	1st	2nd	3rd	4th	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
1µM	149.04%	125.00%	132.14%	119.05%	131.31%	12.98%	0.001
5µM	77.88%	62.50%	91.43%	81.48%	78.32%	12.00%	0.02
10µM	44.71%	37.50%	51.07%	48.41%	45.42%	5.89%	<0.001
Metabolic activity							
Concentration	1st	2nd	3rd	4th	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
1µM	135.94%	126.00%	119.44%	101.79%	120.79%	14.37%	0.02
5µM	115.05%	116.35%	108.39%	92.86%	108.16%	10.78%	<0.001
10µM	86.76%	37.15%	75.80%	81.38%	70.27%	22.53%	<0.001
Biomass							
Concentration	1st	2nd	3rd	4th	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
1µM	94.04%	98.39%	96.61%	95.34%	96.10%	1.86%	0.6
5µM	53.04%	58.82%	55.02%	59.01%	56.47%	2.93%	<0.001
10µM	27.04%	10.68%	30.22%	32.46%	25.10%	9.87%	<0.001

Supplementary Table S2 - IC50 Silmitasertib (μM)

	Proliferation	Metabolic Activity	Cell Biomass
AsPc-1	4.855	8.769	2.019
BxPc-3	2.131	6.949	1.691
Capan-1	7.426	9.951	5.281
Colo357	15.01	14.78	14.32
Panc-1	13.34	19.01	8.615
PaTu8902	14.84	10.78	13.09
PaTu8988S	16.20	38.73	11.50
PaTu8988T	9.925	11.51	11.89
T3M4	9.087	10.53	5.697
SU.86.86	8.091	10.07	7.006

Supplementary Table S3 - Cell Viability Dinaciclib (to 100%Control)

AsPc-1							
Concentration	Proliferation				Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.005 μM		111.49%	102.91%	105.53%	106.64%	4.40%	0.45
0.0075 μM		56.17%	47.57%	56.60%	53.45%	5.09%	<0.001
0.01μM	6.70%	27.23%	19.42%	32.77%	21.53%	11.30%	<0.001
0.1μM	1.79%	0.00%	2.91%	0.00%	1.18%	1.43%	<0.001
Concentration	Metabolic activity				Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.005 μM		105.46%	106.48%	108.34%	106.76%	1.46%	0.93
0.0075 μM		96.94%	81.73%	105.05%	94.57%	11.84%	0.97
0.01μM	8.43%	58.12%	72.37%	30.27%	42.30%	28.56%	<0.001
0.1μM	1.92%	3.93%	1.52%	5.82%	3.30%	1.98%	<0.001
Concentration	Biomass				Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.005 μM		92.92%	89.65%	86.52%	89.70%	3.20%	0.31
0.0075 μM		68.31%	42.00%	40.35%	50.22%	15.69%	0.001
0.01μM	2.80%	16.14%	24.72%	6.42%	12.52%	9.89%	0.001
0.1μM	0.00%	0.27%	0.83%	0.66%	0.44%	0.38%	<0.001

BxPc-3						
Proliferation						
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
0.005 μM	104.76%	102.91%	109.00%	105.56%	3.12%	0.4
0.0075 μM	48.48%	47.57%	58.77%	51.61%	6.22%	<0.001
0.01μM	32.47%	19.42%	30.33%	27.41%	7.00%	<0.001
0.1μM	1.30%	2.91%	0.47%	1.56%	1.24%	<0.001
Metabolic activity						
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
0.005 μM	92.33%	104.15%	93.37%	96.62%	6.54%	>0.99
0.0075 μM	86.78%	97.44%	74.93%	86.38%	11.26%	0.59
0.01μM	61.05%	77.35%	22.59%	53.66%	28.12%	0.007
0.1μM	2.73%	2.39%	2.10%	2.41%	0.32%	<0.001
Biomass						
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
0.005 μM	99.53%	91.55%	96.67%	95.92%	4.04%	0.97
0.0075 μM	87.18%	65.94%	47.04%	66.72%	20.08%	0.01
0.01μM	20.03%	34.31%	7.31%	20.55%	13.51%	<0.001
0.1μM	0.15%	0.26%	0.10%	0.17%	0.08%	<0.001

Capan-1						
	Proliferation					
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001μM	102.67%	92.94%	97.96%	97.86%	4.87%	0.97
0.01μM	48.00%	32.94%	51.02%	43.99%	9.69%	<0.001
0.1μM	4.00%	8.24%	5.10%	5.78%	2.20%	<0.001
1μM	1.30%	6.33%	7.29%	4.97%	3.22%	<0.001
	Metabolic activity					
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001μM	109.49%	93.77%	98.31%	100.52%	8.09%	>0.99
0.01μM	54.20%	79.77%	74.24%	69.40%	13.45%	0.004
0.1μM	10.73%	17.10%	10.41%	12.75%	3.77%	<0.001
1μM	13.43%	21.22%	1.36%	12.00%	10.01%	<0.001
	Biomass					
Concentration	1st	2nd	3rd	Mean	SD	P-value (vs. Control)
Control	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001μM	83.70%	78.14%	87.86%	83.23%	4.88%	0.01
0.01μM	23.94%	32.86%	45.04%	33.95%	10.59%	<0.001
0.1μM	0.97%	1.63%	2.32%	1.64%	0.68%	<0.001
1μM	2.08%	5.89%	0.40%	2.79%	2.81%	<0.001

Supplementary Table S3 - Cell Viability Dinaciclib (to 100%Control)

Colo357													
Concentration	Proliferation									Mean	SD	P-value (vs. Control)	
	1st	2nd	3rd										
	Control	100.00%	100.00%	100.00%									
	0.001μM	59.46%	45.56%	61.75%									
	0.01μM	10.42%	10.81%	10.88%									
	0.05μM	6.56%	5.08%	9.82%									
0.1μM	6.95%	2.02%	2.46%						3.81%	2.73%	<0.001		
Concentration	Metabolic activity									Mean	SD	P-value (vs. Control)	
	1st	2nd	3rd	4th									
	Control	100.00%	100.00%	100.00%	100.00%								
	0.001μM	94.12%	76.57%	77.64%	60.56%								
	0.01μM	39.40%	51.11%	40.57%	33.56%								
	0.05μM	8.79%	11.72%	7.42%	10.59%								
0.1μM	15.01%	11.58%	7.92%	9.08%						10.90%	3.14%	<0.001	
Concentration	Biomass									Mean	SD	P-value (vs. Control)	
	1st	2nd	3rd	4th									
	Control	100.00%	100.00%	100.00%	100.00%								
	0.001μM	73.52%	64.38%	70.06%	54.69%								
	0.01μM	16.70%	34.38%	14.10%	17.54%								
	0.05μM	7.01%	9.10%	4.75%	9.75%								
0.1μM	13.17%	6.71%	2.33%	11.12%						8.33%	4.82%	<0.001	
Panc-1													
Concentration	Proliferation									Mean	SD	P-value (vs. Control)	
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th				
	Control	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%				
	0.001μM	124.09%	118.52%	111.56%									
	0.01μM							53.19%	49.56%				41.55%
	0.025μM							20.21%	27.21%				19.01%
	0.05μM				13.24%	15.27%	12.33%	14.36%	19.91%				14.08%
	0.1μM	12.41%	5.93%	13.61%	2.94%	12.21%	5.48%						
1μM	1.46%	2.96%	8.16%							8.76%	4.50%	<0.001	
4.19%	3.52%	<0.001											
Concentration	Metabolic activity									Mean	SD	P-value (vs. Control)	
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th				
	Control	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%				
	0.001μM	95.16%	96.48%	99.26%									
	0.01μM	88.42%	94.71%	100.45%	103.71%	92.06%	108.72%	84.54%	86.16%				93.61%
	0.025μM							31.23%	29.89%				40.43%
	0.05μM				27.01%	29.64%	26.40%	18.75%	22.35%				23.01%
	0.1μM	23.14%	21.72%	32.10%	30.80%	22.25%	15.99%						
1μM	15.31%	19.76%	13.18%							24.33%	6.07%	<0.001	
16.08%	3.36%	<0.001											
Concentration	Biomass									Mean	SD	P-value (vs. Control)	
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th				
	Control	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%				
	0.001μM	83.15%	108.16%	107.15%									
	0.01μM	53.16%	83.66%	85.13%	78.38%	68.46%	97.42%	64.76%	48.58%				34.13%
	0.025μM							20.14%	15.36%				14.62%
	0.05μM				14.02%	8.96%	8.57%	7.18%	8.90%				9.29%
	0.1μM	4.92%	1.66%	3.12%	11.04%	6.41%	8.63%						
1μM	7.24%	2.00%	2.31%							5.96%	3.49%	<0.001	
3.85%	2.94%	<0.001											
PaTu8902													
Concentration	Proliferation								Mean	SD	P-value (vs. Control)		
	1st	2nd	3rd	4th	5th								
	Control	100.00%	100.00%	100.00%	100.00%	100.00%							
	0.001 μM	78.65%	105.00%	109.62%	93.42%	93.75%							
	0.0025 μM		86.00%	81.73%	77.63%	79.46%							
	0.005 μM	24.99%	43.00%	45.58%	38.16%	43.75%							
0.0075 μM	5.62%	11.00%	9.62%	3.95%	9.82%				8.00%	3.04%	<0.001		
Concentration	Metabolic activity								Mean	SD	P-value (vs. Control)		
	1st	2nd	3rd										
	Control	100.00%	100.00%	100.00%									
	0.001 μM	91.13%	82.95%	75.05%									
	0.0025 μM	97.16%	72.17%	67.64%									
	0.005 μM	63.19%	54.84%	60.56%									
0.0075 μM	30.19%	11.68%	17.96%						19.94%	9.41%	<0.001		
Concentration	Biomass								Mean	SD	P-value (vs. Control)		
	1st	2nd	3rd	4th									
	Control	100.00%	100.00%	100.00%	100.00%								
	0.001 μM	70.23%	85.63%	89.48%	77.68%								
	0.0025 μM		92.82%	75.99%	63.14%								
	0.005 μM	23.59%	70.78%	46.78%	55.58%								
0.0075 μM	8.04%	12.80%	7.24%	23.02%						49.18%	19.73%	<0.001	
12.78%	7.26%	<0.001											

Supplementary Table S3 - Cell Viability Dinaciclib (to 100%Control)

PaTu8988S									
Concentration	Proliferation						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th	6th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001 μM	72.88%	93.55%	95.65%				87.36%	12.58%	0.16
0.005 μM	67.80%	88.17%	84.78%	95.35%	80.77%	79.73%	82.77%	9.26%	0.007
0.0075 μM	50.85%	69.89%	67.39%	82.09%	69.23%	67.57%	67.84%	9.98%	<0.001
0.01 μM	42.37%	30.11%	34.78%	55.35%	44.87%	33.78%	40.21%	9.26%	<0.001
0.025 μM				12.33%	7.69%	6.76%	8.93%	2.98%	<0.001
Concentration	Metabolic activity						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th	6th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001 μM	73.54%	89.51%	77.02%				80.02%	8.40%	0.007
0.005 μM	71.72%	73.91%	68.69%	71.82%	67.85%	98.34%	75.39%	11.46%	<0.001
0.0075 μM	53.60%	33.10%	46.47%	60.54%	64.39%	68.16%	54.38%	12.99%	<0.001
0.01 μM	49.05%	31.51%	34.40%	45.70%	29.75%	48.29%	39.78%	8.85%	<0.001
0.025 μM				19.02%	11.81%	17.99%	16.27%	3.90%	<0.001
Concentration	Biomass						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th	6th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001 μM	96.26%	74.45%	70.28%				80.33%	13.95%	0.08
0.005 μM	84.16%	85.34%	59.42%	69.84%	78.14%	85.46%	77.06%	10.53%	0.008
0.0075 μM	56.18%	72.18%	29.82%	67.20%	50.03%	41.69%	52.85%	15.83%	<0.001
0.01 μM	45.02%	46.21%	28.07%	37.72%	15.61%	20.28%	32.15%	12.85%	<0.001
0.025 μM				14.12%	11.23%	13.14%	12.83%	1.47%	<0.001

PaTu8988T									
Concentration	Proliferation						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd						
Control	100.00%	100.00%	100.00%				100.00%	0.00%	
0.001μM	77.70%	72.51%	77.48%				75.90%	2.94%	<0.001
0.005μM	53.24%	51.79%	34.44%				46.49%	10.46%	<0.001
0.0075μM	2.16%	7.97%	2.65%				4.26%	3.22%	<0.001
0.01μM	3.60%	6.37%	3.31%				4.43%	1.69%	<0.001
Concentration	Metabolic activity						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th	5th				
Control	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%	0.00%	
0.001μM	77.87%	95.52%	61.41%	65.32%	115.93%		83.21%	22.62%	0.15
0.005μM		49.72%	57.74%	25.34%	38.42%		42.81%	14.08%	<0.001
0.0075μM		11.49%	14.05%	6.81%	14.73%		11.77%	3.59%	<0.001
0.01μM	9.22%	9.70%	9.24%		9.50%		9.42%	0.23%	<0.001
Concentration	Biomass						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th					
Control	100.00%	100.00%	100.00%	100.00%			100.00%	0.00%	
0.001μM	87.30%	90.10%	71.03%	82.93%			82.84%	8.41%	0.002
0.005μM	48.27%	42.96%	30.30%	28.94%			37.62%	9.50%	<0.001
0.0075μM	10.73%	11.81%	11.44%	8.90%			10.72%	1.29%	<0.001
0.01μM	8.30%	11.30%	8.84%	7.14%			8.90%	1.75%	<0.001

SU.86.86									
Concentration	Proliferation						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd						
Control	100.00%	100.00%	100.00%				100.00%	0.00%	
0.005 μM	81.82%	95.49%	82.31%				86.54%	7.75%	0.04
0.0075 μM	69.55%	56.39%	66.15%				64.03%	6.83%	<0.001
0.01μM	45.91%	37.59%	50.77%				44.76%	6.67%	<0.001
0.1μM	7.27%	5.26%	5.38%				5.97%	1.13%	<0.001
Concentration	Metabolic activity						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd						
Control	100.00%	100.00%	100.00%				100.00%	0.00%	
0.005 μM	72.94%	97.83%	100.22%				90.33%	15.11%	0.68
0.0075 μM	70.28%	81.54%	70.79%				74.20%	6.36%	0.06
0.01μM	46.05%	77.87%	50.09%				58.00%	17.32%	0.003
0.1μM	35.78%	26.34%	41.26%				34.46%	7.55%	<0.001
Concentration	Biomass						Mean	SD	P-value (vs. Control)
	1st	2nd	3rd						
Control	100.00%	100.00%	100.00%				100.00%	0.00%	
0.005 μM	100.30%	88.19%	96.83%				95.11%	6.24%	0.89
0.0075 μM	89.89%	78.96%	65.79%				78.21%	12.07%	0.04
0.01μM	70.20%	57.49%	43.39%				57.03%	13.41%	<0.001
0.1μM	14.63%	9.67%	9.89%				11.40%	2.80%	<0.001

Supplementary Table S3 - Cell Viability Dinaciclib (to 100%Control)

T3M4							
Concentration	Proliferation				Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001 μM	90.87%	90.57%	91.43%	91.01%	90.97%	0.36%	<0.001
0.0025 μM	80.77%	79.25%	85.36%	80.42%	81.45%	2.69%	<0.001
0.005 μM	77.88%	75.94%	78.21%	73.02%	76.26%	2.38%	<0.001
0.0075 μM	26.44%	26.89%	27.86%	20.90%	25.52%	3.14%	<0.001
Concentration	Metabolic activity				Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001 μM	86.69%	85.81%	84.95%	81.93%	84.85%	2.07%	0.008
0.0025 μM	64.11%	73.51%	83.61%	72.47%	73.43%	7.99%	<0.001
0.005 μM	58.09%	58.32%	68.18%	63.37%	61.99%	4.79%	<0.001
0.0075 μM	35.29%	19.68%	40.56%	35.57%	32.78%	9.06%	<0.001
Concentration	Biomass				Mean	SD	P-value (vs. Control)
	1st	2nd	3rd	4th			
Control	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	
0.001 μM	62.31%	77.39%	95.83%	92.32%	81.96%	15.35%	0.36
0.0025 μM	52.59%	73.37%	95.66%	91.66%	78.32%	19.71%	0.22
0.005 μM	43.37%	69.29%	92.59%	74.47%	69.93%	20.33%	0.06
0.0075 μM	17.39%	36.24%	57.77%	35.71%	36.78%	16.51%	<0.001

Supplementary Table S4 - IC50 Dinaciclib(μM)

	Proliferation	Metabolic Activity	Cell Biomass
AsPc-1	0.005229	0.007234	0.005017
BxPc-3	0.007975	0.01027	0.008264
Capan-1	0.009291	0.01389	0.006561
Colo357	0.001253	0.005359	0.002164
Panc-1	0.01111	0.02789	0.0139
PaTu8902	0.004146	0.004889	0.004156
PaTu8988S	0.009124	0.008096	0.007789
PaTu8988T	0.004939	0.00317	0.003000
SU.86.86	0.009257	0.0335	0.0108
T3M4	0.006146	0.005485	0.005237

Supplementary Table S5 - Apoptosis/Necrosis Silmitasertib (%)

AsPc-1							Mean	SD	P-Value (vs. Control)			
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	0.56	4.71	1.94	5.43	1.34	2.14	5.37	1.59				
1µM	0.91	9.95	1.62	10.0	1.42	4.47	9.46	2.54	0.42			
5µM	0.55	8.22	0.94	14.5	0.88	9.45	11.51	2.85	0.16			
10µM	0.66	18.5	1.31	27.7	1.11	20.1	23.13	4.24	<0.001			
BxPc-3												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	0.43	2.01	1.98	1.24	1.95	2.02	3.21	0.62				
1µM	0.97	6.17	1.42	3.79	1.59	1.48	5.14	1.66	0.32			
2.5µM	0.91	4.94	1.27	3.53	1.17	2.20	4.67	1.02	0.52			
5µM	0.77	6.47	0.90	7.01	0.90	4.00	6.68	1.29	0.05			
Capan-1												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	7.43	10.4	3.59	7.20	2.88	5.47	12.32	4.02				
1µM	8.75	11.9	6.70	7.18	7.30	4.14	15.32	3.90	0.85			
5µM	8.84	11.9	5.55	9.10	2.25	6.88	14.84	4.74	0.9			
10µM	5.47	19.7	3.68	14.4	2.76	9.30	18.44	5.36	0.44			
Colo357												
	1st		2nd		3rd		4th		5th	Mean	SD	P-Value (vs. Control)
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3	
Control	2.91	2.23	2.38	1.81	3.01	0.73	1.41	0.90	1.65	0.88	3.58	1.05
1µM	1.21	0.68	1.72	1.09	0.71	0.60	1.31	0.94	0.80	0.56	1.92	0.56
5µM	1.41	0.83	1.10	0.83	1.13	0.48	0.59	0.63	0.52	0.38	1.58	0.48
10µM	1.32	1.40	0.86	0.97	1.89	0.61	0.53	0.82	1.67	0.69	2.15	0.50
Panc-1												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	0.41	1.76	0.36	0.80	0.13	1.25	1.57	0.43				
1µM	0.097	0.70	0.12	1.19	0.00	0.75	0.95	0.25	0.32			
5µM	0.17	0.66	0.16	1.93	0.24	1.55	1.57	0.54	>0.99			
10µM	0.24	0.72	0.25	1.25	0.00	1.40	1.29	0.23	0.81			
PaTu8902												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	0.45	0.70	0.41	0.99	0.18	1.35	1.36	0.16				
1µM	0.051	0.60	0.31	1.04	0.25	0.99	1.08	0.31	0.98			
5µM	0.046	0.57	0.14	1.02	0.12	1.41	1.10	0.38	0.98			
7.5µM	0.041	0.62	0.21	3.49	0.082	1.15	1.86	1.32	0.85			
10µM	0.056	1.26	0.10	1.86	0.089	1.78	1.71	0.28	0.95			
PaTu8988S												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	2.09	11.7	2.04	12.8	3.68	12.1	14.80	0.81				
1µM	1.93	6.24	2.87	11.3	4.69	8.30	11.78	2.60	>0.99			
5µM	1.36	4.51	1.11	11.7	1.87	6.13	8.89	2.90	0.18			
7.5µM	1.18	6.31	0.59	11.7	1.41	4.37	8.52	2.76	0.09			
10µM	0.91	6.38	0.40	14.5	1.19	6.07	9.82	3.59	0.40			
PaTu8988T												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	0.053	0.99	0.23	0.57	0.098	1.34	1.09	0.26				
1µM	0.032	1.00	0.17	0.74	0.062	1.21	1.07	0.15	>0.99			
5µM	0.031	0.87	0.069	0.76	0.048	1.20	0.99	0.18	0.99			
7.5µM	0.01	1.00	0.00687	0.94	0.062	1.25	1.09	0.16	>0.99			
10µM	0.036	1.20	0.02	0.91	0.055	1.95	1.39	0.45	0.65			
SU.86.86												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	2.15	3.09	1.9	5.26	1.71	3.91	6.01	0.83				
1µM	0.89	3.06	1.54	4.24	2.69	4.62	5.68	1.37	0.96			
5µM	0.86	2.97	1.29	2.77	2.03	2.31	4.08	0.21	0.10			
10µM	1.38	4.20	1.18	4.15	1.92	3.48	5.44	0.11	0.82			
T3M4												
	1st		2nd		3rd		Mean	SD	P-Value (vs. Control)			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3					
Control	4.04	2.76	6.13	5.88	2.75	5.85	9.14	2.16				
1µM	2.44	1.54	7.27	2.14	2.12	2.03	5.85	2.52	0.89			
5µM	2.44	2.34	2.49	5.74	1.51	2.85	5.79	1.73	0.88			
7.5µM	2.64	5.65	2.59	16.3	2.41	10.3	13.30	4.35	0.79			
10µM	3.5	14.3	5.26	33.9	6.12	24.9	29.33	8.80	0.005			

G2: Apoptosis
G3: Necrosis
G2+G3: Cell Deaths

Supplementary Table S6 - Apoptosis/Necrosis Dinaciclib (%)

G2c-1										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)		G2+G3				
Control	1.08	2.75	1.83	3.77	0.97	2.31		4.24	0.99			
0.005µM	2.34	6.83	1.35	10.7	0.90	3.24		8.45	3.27	0.29		
0.0075µM	2.55	11.1	1.52	12.5	1.54	6.03		11.75	2.96	0.04		
0.01µM	2.14	16.8	2.10	18.8	3.86	20.5		21.40	2.24	<0.001		
BxPc-3										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)		G2+G3				
Control	0.46	1.82	1.55	1.75	1.31	2.82		3.24	0.76			
0.005µM	1.35	6.64	4.04	4.33	1.68	2.19		6.74	2.04	0.39		
0.0075µM	1.08	10.3	3.57	6.95	1.64	2.82		8.79	3.08	0.12		
0.01µM	1.15	15.7	2.16	17.7	2.91	9.54		16.39	3.04	0.002		
Capan-1										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd		4th					
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3			
Control	4.28	5.17	4.59	7.47	4.74	7.33	3.16	7.26	11.00	1.12		
0.001µM	5.20	6.33	5.23	3.75	5.23	8.22	3.14	7.87	11.24	1.59	>0.99	
0.01µM	8.01	17.3	6.79	10.7	6.31	12.9	10.9	11.1	21.00	2.96	<0.001	
0.1µM	7.71	37.2	7.09	41.8	8.09	37.6	12.3	34.9	46.67	1.52	<0.001	
Colo357										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd		4th		5th			
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3	
Control	2.50	2.14	2.41	1.41	1.42	0.96	1.04	1.06	1.60	0.99	3.11	
0.001µM	3.85	1.60	4.65	3.13	4.47	1.01	1.86	1.71	1.20	1.45	4.99	
0.01µM	5.06	2.00	4.82	5.51	4.00	2.84	3.21	2.87	2.91	4.71	7.59	
0.05µM	1.96	12.7	1.70	10.4	2.89	12.3	2.02	7.01	2.22	14.8	13.60	
Panc-1										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd		4th					
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3			
Control	0.98	0.72	0.94	0.71	0.28	2.26	0.40	2.71	2.25	0.61		
0.001µM	0.48	1.92	0.50	1.84	0.39	6.29	0.46	9.79	5.42	3.30	0.63	
0.01µM	1.53	1.43	1.61	1.43	0.96	6.16	1.00	8.44	5.64	2.76	0.58	
0.05µM	10.6	3.60	10.5	3.09	12.4	14.9	0.48	10.7	16.57	6.30	0.002	
PaTu8902										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)		G2+G3				
Control	0.51	1.01	1.15	1.88	0.10	1.17		1.94	0.78			
0.003µM	0.26	1.81	0.55	3.17	0.19	0.41		2.13	1.27	>0.99		
0.005µM	0.59	1.77	0.94	3.71	0.20	1.05		2.75	1.42	>0.99		
0.006µM	0.65	3.29	2.75	12.1	0.31	1.34		6.81	5.76	0.75		
0.0075µM	1.10	7.69	4.15	15.5	0.82	2.84		10.70	6.67	0.28		
0.01µM	3.62	19.5	5.27	27.8	5.96	9.50		23.88	7.21	0.002		
PaTu8988S										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)		G2+G3				
Control	4.02	18.2	3.03	10.1	3.87	16.8		18.67	3.97			
0.005µM	4.23	9.84	2.00	5.21	3.60	9.40		11.43	3.01	0.04		
0.0075µM	3.63	9.95	2.02	9.82	3.16	7.65		12.08	1.14	0.07		
0.01µM	3.36	10.1	2.32	10.2	2.88	6.41		11.76	1.79	0.05		
0.05µM	2.33	10.9	1.41	11.0	1.60	12.4		13.21	0.65	0.14		
PaTu8988T										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd		4th					
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2+G3			
Control	0.38	2.6	6.36	4.65	0.42	1.65	0.26	3.81	5.03	3.52		
0.003µM	0.14	1.61	4.03	6.08	0.28	1.65	0.32	2.18	4.07	3.50	>0.99	
0.005µM	0.25	2.19	3.41	7.34	0.51	2.45	0.49	3.85	5.12	3.32	>0.99	
0.006µM	0.35	2.3	3.72	9.30	0.56	2.80	0.91	4.76	6.18	4.11	>0.99	
0.01µM	0.83	9.23	4.54	22.2	1.71	5.03	7.49	12.60	15.91	7.95	0.38	
SU.86.86										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)		G2+G3				
Control	3.82	3.94	4.02	6.45	2.70	6.10		9.01	1.12			
0.005µM	6.06	6.96	3.67	5.97	2.86	4.89		10.14	2.18	0.85		
0.01µM	3.98	6.77	3.74	11.3	2.30	8.71		12.27	1.96	0.21		
0.1µM	4.74	20.7	4.46	24.0	2.51	23.4		26.60	1.33	<0.001		
T3M4										Mean	SD	P-Value (vs. Control)
	1st		2nd		3rd							
Concentration	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)	G2(YP+/PI-)	G3(PI+)		G2+G3				
Control	3.51	7.45	4.90	5.44	5.44	5.72		10.82	0.35			
0.003µM	4.53	4.93	5.80	4.77	5.55	3.65		9.74	0.59	0.90		
0.005µM	3.16	5.63	3.93	4.64	4.53	3.55		8.48	0.30	0.43		
0.0075µM	6.09	11.7	5.98	12.6	6.29	8.05		16.90	1.84	0.01		
0.01µM	9.13	13.8	10.6	19.0	11.6	12.3		25.48	2.94	<0.001		

G2: Apoptosis
G3: Necrosis
G2+G3: Cell Deaths

Supplementary Table S7 - Target Gene Expression (Log2(TPM+1))							
	Silmitasertib Target Genes			Dinaciclib Target Genes			
	<i>CSNK2A1</i>	<i>CSNK2A2</i>	<i>CSNK2B</i>	<i>CDK1</i>	<i>CDK2</i>	<i>CDK5</i>	<i>CDK9</i>
AsPc-1	6.50	5.46	6.53	7.01	5.03	5.04	4.95
BxPc-3	6.75	5.44	6.78	7.25	5.54	5.32	5.65
Capan-1	6.59	5.42	7.52	5.73	5.42	5.68	5.32
Colo357	6.76	5.51	6.73	6.50	4.37	3.96	4.57
Panc-1	7.69	5.41	7.70	7.21	5.61	5.10	4.87
SU.86.86	5.83	5.68	7.28	6.71	5.31	4.08	5.37
PaTu8988S	6.99	5.63	7.26	7.14	5.17	4.53	5.47
PaTu8988T	7.01	6.47	7.45	7.55	6.19	4.01	5.28
PaTu8902	7.15	6.42	7.41	8.51	6.85	3.51	5.38
T3M4	6.91	6.12	7.07	6.33	6.06	3.98	6.63
Control	3.63	4.43	6.00	0.41	2.83	1.98	4.50

Supplementary Table S8 - Silmitasertib Target Gene Variants in PDAC Cell Lines

Cell line	#Chromosome	Start	End	Reference	Observed	Zygosity	Variant	Confidance	Variant Allele	Frequency	Reading Depth	Gene	Base Change	Animo Acin Change	Variant Type
BxPc-3	chr20	464502	464502	G	T	het		74.77		33.3	18	CSNK2A1	NM_001895.3:c.103C>A	-	3_prime_UTR_variant
BxPc-3	chr20	468419	468419	G	A	het		10.43		66.7	3	CSNK2A1	NM_001895.3:c.825-200C>T	-	intron_variant
BxPc-3	chr20	480619	480621	AA	T	hom		804.73		100	64	CSNK2A1	NM_001895.3:c.214-42_214-41delTTinsA	-	intron_variant
BxPc-3	chr20	483933	483933	C	T	het		187.77		61.5	13	CSNK2A1	NM_001895.3:c.213+1829G>A	-	intron_variant
Capan-1	chr20	464502	464502	G	T	het		63.77		23.5	17	CSNK2A1	NM_001895.3:c.103C>A	-	3_prime_UTR_variant
Capan-1	chr20	467240	467240	T	C	het		161.77		66.7	12	CSNK2A1	NM_001895.3:c.974-134A>G	-	intron_variant
Panc-1	chr20	464502	464502	G	T	het		24.78		37.5	8	CSNK2A1	NM_001895.3:c.103C>A	-	3_prime_UTR_variant
Panc-1	chr20	480619	480621	AA	T	hom		564.73		100	41	CSNK2A1	NM_001895.3:c.214-42_214-41delTTinsA	-	intron_variant
Panc-1	chr20	483933	483933	C	T	hom		473.77		100	15	CSNK2A1	NM_001895.3:c.213+1829G>A	-	intron_variant
PaTu8902	chr20	464502	464502	G	T	het		36.77		33.3	15	CSNK2A1	NM_001895.3:c.103C>A	-	3_prime_UTR_variant
PaTu8988T	chr20	464502	464502	G	T	het		36.77		23.1	13	CSNK2A1	NM_001895.3:c.103C>A	-	3_prime_UTR_variant
PaTu8988T	chr20	485995	486020	GTT	G	hom		42.45		66.7	3	CSNK2A1	NM_001895.3:c.102-124_102-123delAA	-	intron_variant
PaTu8988S	chr20	464502	464502	G	T	het		43.77		27.3	11	CSNK2A1	NM_001895.3:c.103C>A	-	3_prime_UTR_variant
T3M4	chr20	480619	480621	AA	T	hom		453.73		100	29	CSNK2A1	NM_001895.3:c.214-42_214-41delTTinsA	-	intron_variant
BxPc-3	chr16	58204541	58204541	C	A	hom		181.84		100	6	CSNK2A2	NM_001896.2:c.430-1944G>T	-	intron_variant
PaTu8988T	chr16	58200863	58200863	T	C	het		12.05		66.7	3	CSNK2A2	NM_001896.2:c.726+248A>G	-	intron_variant
PaTu8988T	chr16	58208602	58208602	G	A	hom		29.12		100	3	CSNK2A2	NM_001896.2:c.370-186C>T	-	intron_variant
PaTu8988T	chr16	58208605	58208605	G	A	het		10.48		66.7	3	CSNK2A2	NM_001896.2:c.370-191C>T	-	intron_variant
PaTu8988S	chr16	58208605	58208616	G	GA	het		28.17		66.7	3	CSNK2A2	NM_001896.2:c.370-192dupT	-	intron_variant
T3M4	chr16	58200616	58200618	CA	TC	het		253.75		39	41	CSNK2A2	NM_001896.2:c.727-29_727-28delTGinsGA	-	intron_variant
T3M4	chr16	58200946	58200948	CG	C	het		97.76		80	5	CSNK2A2	NM_001896.2:c.726+164delC	-	intron_variant
T3M4	chr16	58230796	58230796	A	C	het		164.77		28.1	32	CSNK2A2	NM_001896.2:c.105-48T>G	-	intron_variant
AsPc-1	chr6	31635960	31635968	ATTCCAAA	C	hom		39.48		100	3	CSNK2B	NM_001320.6:c.175+213_175+220delATTCCAAAsinsC	-	upstream_gene_variant
T3M4	chr6	31635960	31635968	ATTCCAAA	C	hom		78.03		100	4	CSNK2B	NM_001320.6:c.175+213_175+220delATTCCAAAsinsC	-	upstream_gene_variant

Supplementary Table S9 - Dinaciclib Target Gene Variants in PDAC Cell Lines

Cell line	#Chromosome	Start	End	Reference	Observed	Zygosity	Variant	Confidance	Variant Allele Frequency	Reading Depth	Gene	Base Change	Animo Acin Change	Variant Type
BxPc-3	chr10	62551889	62551891	AA	GT	hom	2437.28		100	89	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
Capan-1	chr10	62551889	62551891	AA	GT	het	868.19		34.3	143	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
Colo357	chr10	62544705	62544705	A	G	het	298.77		36.7	30	CDK1	NM_001320918.1:c.194+86A>G	-	intron_variant
Colo357	chr10	62551889	62551891	AA	GT	het	5363.03		100	90	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
Panc-1	chr10	62551889	62551891	AA	GT	hom	2701.24		100	101	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
PaTu8902	chr10	62551889	62551891	AA	GT	hom	2325.28		100	82	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
PaTu8988T	chr10	62551889	62551891	AA	GT	hom	2602.46		100	96	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
PaTu8988S	chr10	62551889	62551891	AA	GT	hom	2186.77		100	80	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
SU.86.86	chr10	62551889	62551891	AA	GT	hom	1368.8		100	52	CDK1	NM_001320918.1:c.654-17_654-16delAAinsGT	-	intron_variant
BxPc-3	chr12	56364719	56364719	T	A	het	10.5		30	10	CDK2	NM_001798.4:c.589-109T>A	-	upstream_gene_variant
Colo357	chr12	56360765	56360765	C	T	hom	1693.77		100	71	CDK2	NM_001798.4:c.-28C>T	-	5_prime_UTR_variant
Colo357	chr12	56361521	56361527	TTC	T	hom	571.73		100	14	CDK2	NM_001798.4:c.117-115,117-114delTTC	-	upstream_gene_variant
Colo357	chr12	56362111	56362111	A	G	hom	92.03		100	5	CDK2	NM_001798.4:c.315+158A>G	-	upstream_gene_variant
Panc-1	chr7	150751809	150751809	C	A	het	12.05		66.7	3	CDK5	NM_004935.3:c.651-257G>T	-	upstream_gene_variant
Colo357	chr9	130548593	130548595	G	CCA	het	33.47		72.7	11	CDK9	NM_001261.3:c.92+75_92+76insAC	-	downstream_gene_variant

Supplementary Table S10 - *KRAS* Variants in PDAC Cell Lines

Cell line	#Chromosome	Start	End	Reference	Observed	Zygositities	Variant Confidence	Variant Allele Frequency	Reading Depth	Gene	Base Change	Animo Acin Change	Variant Type
AsPc-1	chr12	25398284	25398284	C	T	hom	2219.77	100	90	<i>KRAS</i>	NM_033360.2:c.35G>A	NM_033360.2:p.Gly12Asp	missense_variant
Capan-1	chr12	25398284	25398284	C	A	hom	1774.77	97.1	70	<i>KRAS</i>	NM_033360.2:c.35G>T	NM_033360.2:p.Gly12Val	missense_variant
Colo357	chr12	25398284	25398284	C	T	het	403.77	23.8	126	<i>KRAS</i>	NM_033360.2:c.35G>A	NM_033360.2:p.Gly12Asp	missense_variant
Panc-1	chr12	25398284	25398284	C	T	het	2675.77	62.1	203	<i>KRAS</i>	NM_033360.2:c.35G>A	NM_033360.2:p.Gly12Asp	missense_variant
PaTu8902	chr12	25398284	25398284	C	A	hom	1052.77	100	42	<i>KRAS</i>	NM_033360.2:c.35G>T	NM_033360.2:p.Gly12Val	missense_variant
PaTu8988T	chr12	25398284	25398284	C	A	hom	1212.77	98	49	<i>KRAS</i>	NM_033360.2:c.35G>T	NM_033360.2:p.Gly12Val	missense_variant
PaTu8988S	chr12	25398284	25398284	C	A	hom	1541.77	96.9	65	<i>KRAS</i>	NM_033360.2:c.35G>T	NM_033360.2:p.Gly12Val	missense_variant
SU.86.86	chr12	25398284	25398284	C	T	het	6018.77	83.7	319	<i>KRAS</i>	NM_033360.2:c.35G>A	NM_033360.2:p.Gly12Asp	missense_variant
T3M4	chr12	25380275	25380275	A	C	het	709.77	32.6	129	<i>KRAS</i>	NM_033360.2:c.183A>C	NM_033360.2:p.Gln61His	missense_variant

Supplementary Table S11 - *TP53* Variants in PDAC Cell Lines

Cell line	#Chromosome	Start	End	Reference	Observed	Zygosity	Variant Confidence	Variant Allele Frequency	Reading Depth	Gene	Base Change	Amino Acid Change	Variant Type
AsPc-1	chr17	7578526	7578530	CA	C	hom	3365.77	96.4	110	<i>TP53</i>	NM_000546.4:c.403delT	NM_000546.4:p.Cys135fs	frameshift_variant
Panc-1	chr17	7577120	7577120	C	T	hom	1977.77	98.8	81	<i>TP53</i>	NM_000546.4:c.818G>A	NM_000546.4:p.Arg273His	missense_variant
BxPc-3	chr17	7578190	7578190	T	C	hom	2653.77	99	103	<i>TP53</i>	NM_000546.4:c.659A>G	NM_000546.4:p.Tyr220Cys	missense_variant
Capan-1	chr17	7578454	7578454	G	A	hom	2094.77	100	83	<i>TP53</i>	NM_000546.4:c.476C>T	NM_000546.4:p.Ala159Val	missense_variant
Colo357	chr17	7579419	7579424	AG	A	hom	4167.73	100	130	<i>TP53</i>	NM_000546.4:c.267delC	NM_000546.4:p.Ser90fs	frameshift_variant
PaTu8902	chr17	7577094	7577094	G	A	hom	2250.77	100	79	<i>TP53</i>	NM_000546.4:c.844C>T	NM_000546.4:p.Arg282Trp	missense_variant
PaTu8988T	chr17	7577094	7577094	G	A	hom	1503.77	100	57	<i>TP53</i>	NM_000546.4:c.844C>T	NM_000546.4:p.Arg282Trp	missense_variant
PaTu8988S	chr17	7577094	7577094	G	A	hom	2498.77	100	97	<i>TP53</i>	NM_000546.4:c.844C>T	NM_000546.4:p.Arg282Trp	missense_variant
SU.86.86	chr17	7573948	7573948	C	A	hom	665.77	100	24	<i>TP53</i>	NM_000546.4:c.1079G>T	NM_000546.4:p.Gly360Val	missense_variant
SU.86.86	chr17	7577548	7577548	C	T	hom	1415.77	100	54	<i>TP53</i>	NM_000546.4:c.733G>A	NM_000546.4:p.Gly245Ser	missense_variant
T3M4	chr17	7578190	7578190	T	C	hom	2061.77	100	78	<i>TP53</i>	NM_000546.4:c.659A>G	NM_000546.4:p.Tyr220Cys	missense_variant

Supplementary Table S12 - Gene expression *KRAS* ($\text{Log}_2(\text{TPM}+1)$)

	<i>KRAS</i> Expression
AsPc-1	4.79
BxPc-3	4.53
Capan-1	4.40
Colo357	4.16
Panc-1	6.11
PaTu8902	4.51
PaTu8988S	4.65
PaTu8988T	4.46
SU.86.86	7.09
T3M4	5.79
Control	2.14

Supplementary Table S13 - Gene expression *TP53* (Log₂(TPM+1))

	<i>TP53</i> Expression
AsPc-1	1.24
BxPc-3	5.42
Capan-1	4.39
Colo357	2.13
Panc-1	5.29
PaTu8902	5.37
PaTu8988S	5.35
PaTu8988T	5.34
SU.86.86	4.61
T3M4	5.26
Control	2.83