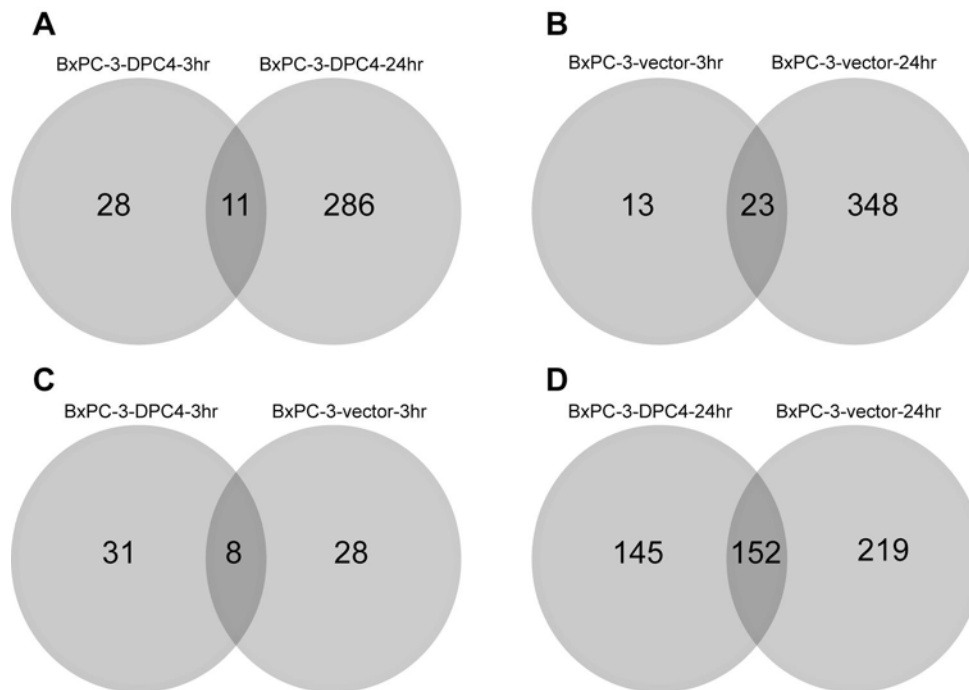


**Supplementary Figure 1. Knockdown of DPC4 gene expression through RNAi gene silencing.**

A. The retrovirus vector used for RNAi gene silencing with H1 promoter. B. The oligo cloning site, oligo design for unidirectional cloning into oligo cloning site and the target site from the DPC4 coding region used for DPC4 gene expression knockdown. C. Knockdown of DPC4 gene expression using RNAi gene silencing. Twenty microgram cell lysate was loaded each lane. lane 1, HPDE6 cells; lane 2, HPDE6-siRNA cells, one of eight stable DPC4 knockdown clones and lane 3, HPDE6-vector cells, stable HPDE6 clone transfected with pMSCVpuroH empty vector.



**Supplementary Figure 2. Gene responses to UA62001 treatment in DPC4 isogenic cell lines at 3 and 24 hours**

Venn diagram illustrates gene responses to UA62001 treatment and the overlap of the genes differentially regulated in DPC4 isogenic cell lines at 3 and 24 hours based on the selection criteria described in Materials and Methods.

- A. Differentially regulated genes in BxPC-3-DPC4 cells by UA62001 treatment. 39 genes represented by 39 probes and 297 genes represented by 390 probes are differentially regulated at 3 and 24 hours respectively. Eleven genes are overlapped.
- B. Differentially regulated genes in BxPC-3-vector cells by UA62001 treatment. 36 genes represented by 36 probes and 371 genes represented by 436 probes are differentially regulated at 3 and 24 hours respectively. Twenty genes are overlapped.
- C. Differentially regulated genes between DPC4 isogenic cell lines by UA62001 treatment at 3 hours. 39 genes in BxPC-3-DPC4 cells and 36 genes in BxPC-3-vector cells are differentially regulated. Eight genes are overlapped.
- D. Differentially regulated genes between DPC4 isogenic cell lines by UA62001 treatment at 24 hours. 297 genes in BxPC-3-DPC4 cells and 371 genes in BxPC-3-vector cells are differentially regulated. 152 genes are overlapped.

Supplementary table. Primers used for quantitative real-time RT-PCR

Gene name	Gene Acc#	Forward primer	Reverse primer	Position in coding region	PCR product size
CNNB1	NM_031966	5'TGGTGTCACTGCCATGTTT3'	5'CCGACCCAGACCAAAGTTTA3'	740-897	158 bp
CNNB2	NM_004701	5'CAGTCCCAAATCCGAGAAA3'	5'TCTGAGACAAGCAGGAAGCA3'	726-952	227 bp
CDC2	NM_001786	5'CCATGGGGATTGAGAAATTG3'	5'CCATTTTGCCAGAAATTCGT3'	612-841	230 bp
MCM2	NM_004526	5'TCTCACGCTTTGACATCCTG3'	5'ACCCTCTCCTTGGCGTAGAT3'	1961-2192	232 bp
MCM3	NM_002388	5'TTCCTCAGCTGTGTGGTCTG3'	5'CAAGGGGATTGTTCTCCTCA3'	358-553	196 bp
MCM4	NM_005914	5'ACCCTCAGGACGAAGCCTAT3'	5'CGAGGGTATGCAGAAACCAT3'	1955-2195	241 bp
MCM5	NM_006739	5'CTGGGGGAGTACTGGATTGA3'	5'ATGACCTGGATGTCCTGGAG3'	193-380	188 bp
MCM6	NM_005915	5'ATCCCCCGCAGTTTAGAAGT3'	5'CCTCGAATGCCTTCTGTCTC3'	658-848	191 bp
MCM7	NM_005916	5'TGAACTCGGGAAGAAGCAGT3'	5'CTCTTGTACGGCATCAGCAA3'	72-249	178 bp
$\beta$ -Actin	NM_001101	5'ATCACCATTGGCAATGAGCG3'	5'TGTTGGCGTACAGGTCTTTG3'	742-870	149 bp