

Supplemental Table 1. Densitometric analysis of MUC1 and β -actin levels in MUC1 siRNA treated Capan-1 cell line using Image J software (Figure 1C).

Samples	MUC1			β -actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
Capan-1 WT	0.08	35.09	35.09	0.03	119.16	1.00
Capan-1 Ctrl siRNA	0.08	40.10	46.26	0.03	103.31	1.15
Capan-1 MUC1 siRNA	0.08	3.63	3.66	0.03	118.16	1.01
% expression after knockdown			10.43			

Supplemental Table 2. Densitometric analysis of MUC1 and β -actin levels in KCKO and KCM cell lines using Image J software (Figure 2A).

Samples	MUC1			β -actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
KCKO	0.11	15.36	19.40	0.02	98.10	1.26
KCM	0.11	141.88	141.88	0.02	123.94	1.00

Supplemental Table 3. Densitometric analysis of MUC1 and β -actin levels in BxPC3 Neo and BxPC3 MUC1 cell lines using Image J software (Figure 3A).

Samples	MUC1			β -actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
BxPC3 Neo	0.11	0.00	0.00	0.04	119.80	1.1
BxPC3 MUC1	0.11	97.01	97.01	0.04	129.61	1.0

Supplemental Table 4. Densitometric analysis of MRP1 and β -actin levels in BxPC3 Neo and BxPC3 MUC1 tumor lysate using Image J software (Figure 4B).

Samples	MRP1			β -actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
KCKO	0.08	42.01	42.01	0.06	110.39	1.00
KCM	0.08	124.33	125.39	0.06	109.46	1.01
BxPC3 Neo	0.09	54.00	58.96	0.06	96.57	1.09
BxPC3 MUC1	0.09	144.24	144.24	0.06	105.44	1.00

Supplemental Table 5. Densitometric analysis of MUC1 expression in BxPC3 Neo and BxPC3 MUC1 tumor lysate using Image J software (Figure 4D).

Samples	MUC1			MRP1			β-actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
BxPC3 Neo sample #1	0.224	62.521	76.3	0.061	80.358	98.07	0.061	127.075	1.22
BxPC3 Neo sample #2	0.224	70.731	73.2	0.061	81.448	84.26	0.061	149.909	1.03
BxPC3 MUC1 sample #3	0.224	162.151	165.1	0.061	131.45	133.80	0.061	152.352	1.02
BxPC3 MUC1 sample #4	0.224	141.456	141.5	0.061	99.342	99.34	0.061	155.077	1.00

Supplemental Table 6. Densitometric analysis of phospho Akt and total Akt levels in cell lines using image J software (Figure 5A).

Samples	phospho-Akt			Akt			β-actin			phospho Akt/total Akt	MUC1+ve/MUC1 -ve
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean		
KCKO	0.03	66.78	70.22	0.04	117.93	124.00	0.03	158.26	1.05	0.57	
KCM	0.03	120.48	120.48	0.04	113.24	113.24	0.03	166.41	1.00	1.06	1.88
BxPC3 Neo	0.04	72.50	77.32	0.04	145.17	154.83	0.03	141.58	1.07	0.50	
BxPC3 MUC1	0.04	154.03	156.82	0.04	164.28	167.26	0.03	148.31	1.02	0.94	1.88

Supplemental Table 7. Densitometric analysis of total Akt, MRP1, MUC1 and β-actin levels in Akt siRNA treated Capan-1 cells using image J software (Figure 5 B).

Samples	Akt			MRP1			MUC1			β-actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
Capan-1 WT	0.02	131.38	131.37	0.03	194.81	194.81	0.01	75.71	75.71	0.01	161.14	1.00
Capan-1 Ctrl siRNA	0.02	133.57	139.52	0.03	100.44	104.91	0.01	65.00	67.89	0.01	154.27	1.04
Capan-1 Akt siRNA	0.02	94.27	80.12	0.03	35.64	35.87	0.01	23.36	23.51	0.01	160.10	1.01
% expression after knockdown			60.99									
Fold change						5.43			3.22			

Supplemental Table 8. Densitometric analysis of total Akt, MRP1, MUC1 and β-actin levels in Akt siRNA treated BxPC3 cells using image J (Figure 5 C).

Samples	Akt			MRP1			MUC1			β-actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
BxPC3 Neo WT	0.052	149.0	166.4	0.05	83.943	93.7	0.083	4.998	5.6	0.061	90.157	1.1
BxPC3 MUC1 WT	0.052	125.6	176.5	0.05	137.408	193.1	0.083	124.328	174.7	0.061	71.64	1.4
BxPC3 MUC1 Ctrl siRNA	0.052	114.2	139.9	0.05	112.779	138.2	0.083	87.616	107.4	0.061	82.154	1.2

BxPC3 MUC1 Akt siRNA	0.052	86.5	86.5	0.05	41.376	41.4	0.083	71.432	71.4	0.061	100.667	1.0
% expression after kncokdown			49.02									
Fold change						4.67			2.45			

Supplemental Table 9. Densitometric analysis of total Akt, MRP1, MUC1 and β -actin levels in KCKO cells and Akt siRNA treated KCM cells using image J (Figure 5D).

Samples	Akt			MRP1			MUC1			β -actin		
	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean	Area	Mean	Adjusted mean
KCKO WT	0.049	93.9	117.3	0.06	56.9	71.0	0.066	0	0	0.052	82.5	1.25
KCM WT	0.049	79.2	81.4	0.06	93.6	96.3	0.066	132.1	135.8	0.052	100.3	1.03
KCM Ctrl siRNA	0.049	80.2	89.0	0.06	84.8	94.1	0.066	135.6	150.5	0.052	92.9	1.11
KCM Akt siRNA	0.049	22.9	22.9	0.06	81.6	81.6	0.066	115.9	115.9	0.052	103.1	1.00
% expression after kncokdown			28.16									
Fold change						1.18			1.17			

Supplemental Table 10. Densitometric analysis of the PCR product following ChIP assay in Capan-1 cells (Figure 6C).

ChIP region I	Area	Arbitrary units	Fold enrichment (CT2 DNA/ IgG DNA)
Capan-1 Input	5472	242	
Capan-1 IgG	5472	19	
Capan-1 CT2	5472	124	6.5
ChIP region II	Area	Arbitrary units	Fold enrichment (CT2 DNA/ IgG DNA)
Capan-1 Input	4300	240	
Capan-1 IgG	4300	46	
Capan-1 CT2	4300	16	0.3

Supplemental Table 11. Densitometric analysis of the PCR product following ChIP assay in KCKO and KCM cells (Figure 6C).

ChIP region I	Area	Arbitrary units	Fold enrichment (CT2 DNA/ IgG DNA)
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KCKO Input	840	185	
KCKO IgG	840	43	
KCKO CT2	840	29	0.7
KCM Input	0.107	152	
KCM IgG	0.107	40	
KCM CT2	0.107	128	3.2
ChIP region II	Area	Arbitrary units	Fold enrichment (CT2 DNA/ IgG DNA)
KCKO Input	406	85	
KCKO IgG	406	27	
KCKO CT2	406	20	0.7
KCM Input	0.078	141	
KCM IgG	0.078	35	
KCM CT2	0.078	25	0.7

Supplemental Table 12. Densitometric analysis of the PCR product following ChIP assay in BxPC3 Neo and BxPC3 MUC1 cells (Figure 6C).

ChIP region I	Area	Arbitrary units	Fold enrichment (CT2 DNA/ IgG DNA)
BxPC3 Input	0.031	123.33	
BxPC3 IgG	0.031	96.05	
BxPC3 CT2	0.031	108.44	1.1
BxPC3 Input	0.031	212.65	
BxPC3 IgG	0.031	93.28	
BxPC3 CT2	0.031	101.67	1.1
ChIP region II	Area	Arbitrary units	Fold enrichment (Chip/Input DNA)
BxPC3 Input	0.031	95.11	
BxPC3 IgG	0.031	83.85	
BxPC3 CT2	0.031	85.30	1.0
BxPC3 Input	0.031	98.65	
BxPC3 IgG	0.031	80.50	
BxPC3 CT2	0.031	79.74	1.0

