

Supplementary Data

MicroRNA 138 upregulation is associated with decreasing levels of *CCND1* gene expression and promoting cell death in human prostate cancer cell lines

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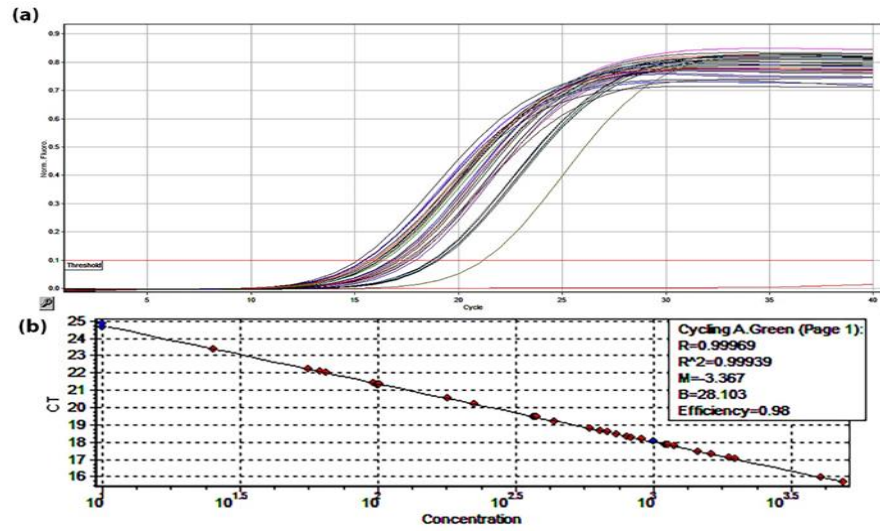


Figure S1. (a) Difference plot of the same sample. Serial dilutions of 10^1 , 10^2 and 10^3 of a pooled cDNA sample were tested with of GAPDH primers. (b) qRT-PCR efficiency of GAPDH gene (data of other set of primers is not shown).

Table S1. The expression of miR- 138 evidently diminished in PCa clinical samples in comparison U6 and U47 as normalizers.

Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
U47	REF	0.7384	1.981				
U6	REF	0.6575	0.505				
mir 138-5p	TRG	0.7397	0.266	0.051 - 1.402	0.012 - 5.326	0.004	DOWN

Table S2. Results of quantitative RT-PCR on all candidate genes in PC3 cell lines. Substantial overexpression of *CCND1* in comparison with *GAPDH* as a housekeeping gene in PC3 cells. The expression profile of other candidate genes, including *ABL*, *CCND3*, *VIM*, *TWIST1*, *HIF1A*, and *TERT* genes exhibited no considerable change in comparison with *GAPDH* in the PC3 cell line.

Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
GAPDH	REF	0.98	1.000				
ABL	TRG	0.99	0.952	0.090 - 9.223	0.012 - 25.820	0.931	
CCND1	TRG	1.0	3.210	0.308 - 23.123	0.099 - 69.005	0.028	UP
CCND3	TRG	1.0	0.408	0.032 - 5.532	0.005 - 19.999	0.178	
HIF1a	TRG	0.99	2.233	0.281 - 32.173	0.026 - 82.124	0.185	
VIM	TRG	0.8	0.674	0.113 - 3.477	0.023 - 11.487	0.386	

Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
GAPDH	REF	0.95	1.000				
Twst1	TRG	0.9	0.623	0.022 - 16.699	0.002 - 423.948	0.384	
TERT	TRG	0.95	1.021	0.009 - 54.980	0.000 - 3,515.604	0.976	

Table S3. Results of quantitative RT-PCR on *CCND1* expression in comparison with *GAPDH* following transfection with miR-138-5p-mimic in (a) PC3 and (b) DU145 cells.

(a)

Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
GAPDH	REF	1.0	1.000				
CCND1	TRG	1.0	0.210	0.088 - 0.467	0.043 - 1.529	0.009	DOWN

(b)

Gene	Type	Reaction Efficiency	Expression	Std. Error	95% C.I.	P(H1)	Result
GAPDH	REF	1.0	1.000				
CCND1	TRG	1.0	0.530	0.260 - 1.149	0.124 - 2.037	0.090	