

Coordinate microRNA-mediated regulation of protein complexes in prostate cancer
 Mohammed alshalalfa, Gary Bader, Tarek Bismar, Reda Alhajj

Table S2: This table lists the miRNAs that play a role in prostate cancer progression based on our analyzed expression data sets; either prostate cell lines or prostate tissue. It also lists the experimentally verified targets for some of them that we extracted from literature.

miRNA	Known targets in prostate context (cell line or tissue)	Reference	Function	Experimentally verified target pathways
miRNA-221	P27 ^{Kip1} (CDKN1B)	1,8	Oncogene	Development and metastasis of PCa, AR-mediated signaling
miRNA-222	P27 ^{Kip1} (CDKN1B)	1,8	Oncogene	Development and metastasis of PCa, AR-mediated signaling
miRNA-21	MARCKS PDCD4 TPM1 BMPRII	1,8 1,8 1,8 3,8	Oncogene	Development and metastasis of PCa , AR-mediate signaling
miRNA-125b	BAK1 EIF4EBP1	1,8 1	Oncogene	cell proliferation
miRNA-101	EZH2	1,3,8	Tumor suppressor	Cell growth and invasiveness
miRNA-126*	Prostein (SLC45A3) EGFL7	1,8 2	Tumor suppressor	VEGF signaling and vessel development
miRNA-146a	ROCK1	1,3	Tumor suppressor	HA/Rock1 pathway
miRNA-330	E2F1	3	Tumor suppressor	AKT signaling
miRNA-200a	ZEB1 ZEB2	3 3	Tumor suppressor	epithelial to mesenchymal transition
miRNA-200b	ZEB1	3	Tumor	epithelial to

	ZEB2	3	suppressor	mesenchymal transition
miRNA-429		3	Tumor suppressor	epithelial to mesenchymal transition
miRNA-200c	ZEB1 ZEB2	3,8		
miRNA-141		3		
miRNA-34a	P53 CDK6 SIRT1	3,8 3,8 3,8	Tumor suppressor	AR, p53 pathway
miRNA-17-5p		3	Tumor suppressor	
miRNA-17-3p	VIM	3	Tumor suppressor	
miRNA-193b		8		
miRNA-92		3		
miRNA-106a		3,8		
miRNA-155		3,8		
miRNA-338		3		
miRNA-126		3		
miRNA-181b		3,8		
miRNA-181c		3		
miRNA-224		3,8		
miRNA-23b	c-MYC GLS	3		
miRNA-100	SMARCA5 SMARCD1 mTOR	3,6		
miRNA-145	ICP4 MYO6	3,4,8		
miRNA-15a	BCL2 CCND1 WNT3A	3	Tumor suppressor	VEGF signaling
miRNA-16	BCL2 CCND1 WNT3A	3,8	Tumor suppressor	VEGF signaling
miRNA-23a	c-MYC GLS	3	Tumor suppressor	
miRNA-449a	HDAC1	3	Tumor suppressor	
miRNA-331-3p	CDCA5 KIF23 ERBB2	3 3 3,8	Tumor suppressor	
miRNA-373	CD44	3	Tumor suppressor	

miRNA-520c	CD44	3	Tumor suppressor	
miRNA-205	ZEB2 ERBB3 PRKCE	3,8 3,8 3,8	Tumor suppressor	
miRNA-143	ERK5 MYO6 ICP4	3,8 8 8	Tumor suppressor	
miRNA-20a	E2F1 E2F2 E2F3	3 3 3	Oncogene	
miRNA-106b	E2F1 CDKN1A	3 3	Oncogene	
miRNA-32	Bim1 BCL2	3	Oncogene	
miRNA-218		3		
miRNA-let7c		3,8		
miRNA-1	HDAC4 XPO6 Notch3	4	Tumor suppressor	Inhibiting cell proliferation
miRNA-206	HDAC4	4		
miRNA-133a		4		
miRNA-182	SLC39A1	5		
miRNA-183		5		
miRNA-96		5		
miRNA-99a	SMARCA5 SMARCD1 mTOR(FRAP1) KLK3	6 6 6		
miRNA-99b	SMARCA5 SMARCD1 mTOR (FRAP1) KLK3	6		
miRNA-204		7		
miRNA-210		7		
miRNA-451		7		
mi-RNA425-5p		7		

*: indicates that the miRNA is predicted to have high influence on target partners based on miRNA-target influence network

Reference:

[1] Pang Y , Young CY and Yuan H, MicroRNAs and prostate cancer, Acta Biochim Biophys Sin, 2010, 42:363-369

- [2] Nikolic I, Plate K, Schmidt M, EGFL7 meets miRNA-126: an angiogenesis alliance, *Vascular Cell*, 2010, 2:9
- [3] Saini S, Majid S, and Dahiya R, Diet, microRNAs and prostate cancer, *Pharm Res*, 2010, 27:1014-1026
- [4] Hudson PS, et al, MicroRNA-1 is a candidate tumor suppressor and prognostic marker in human prostate cancer, *Nucleic Acids Research*, 2011, 1-15
- [5] Mihelich BL, et al, miR-183-96-182 cluster is overexpressed in prostate tissue and regulates zinc homeostasis in prostate cells, *The J.of Biol Chem*, 2011, 296:44503-44511
- [6] Sun D, et al, miR-99 family of microRNAs suppresses the expression of prostate-specific antigen and prostate cancer cell proliferation, *Cancer Research*, 2011, 71:1313-1324
- [7] Martens-Uzunova ES, et al, Diagnostic and prognostic signature from the small non-coding RNA transcriptome in prostate cancer, *Oncogene*, 2012, 31:978-991
- [8] Xu J et al, Prioritizing candidate disease miRNAs by topological features in the miRNA target-dysregulated network: case study of prostate cancer, *Molecular Cancer Therapeutics*, 2011,10,1857-1866