

Table 2 The down regulated miRNAs and their target mRNAs selected based on the REC score. miRNAs are selected based on their low expression in ovarian cancer as compared to controls. The target mRNAs were found using Cancerminer database and selected based on REC score. Some miRNAs were not found in the Cancerminer database and those were excluded from the Table. 22% of the microRNAs are related to tumorigenesis

miRNA	Location	Cancerminer	REC Score	Assoc. Score	Function	Involved in tumorigenesis
miR-515-3p	8q24.3	ARHGAP39	-3.52	-5.51	Rho GTPase Activating Protein	No
hsa-mir-519c	20p13	MAVS	-3.19	-4.77	Mitochondrial Antiviral Signaling Protein	No
hsa-mir-524	11p11.2	OR4B1	-3.20	-6.42	Olfactory Receptor, Family 4,	No
hsa-miR-498	19p12	TMEM59L	-4.34	-1.02	Transmembrane Protein 59-Like	No
hsa-mir-519e	17q22	DGKE	-3.24	0.93	Diacylglycerol Kinase	No
hsa-mir-519b	8q24.13	FAM83A	-3.65	-1.52	Family With Sequence Similarity 83	No
hsa-mir-519d	18q21.1	DYM	-3.29	1.10	Dyggve-Melchior-Clausen Syndrome Protein	No
hsa-mir-527	1q21	S100A2	-3.83		S100 Calcium Binding Protein A2	Yes
hsa-mir-520f	2q21.1	TSN	-3.50	1.69	Recombination Hotspot-Binding Protein	Yes
hsa-mir-520d	11p14.2	FIBIN	-3.35	0.57	Fin Bud Initiation Factor Homolog	No
hsa-mir-516b-1	8q24.3	ZNF7	-4	-5.81	Zinc Finger Protein	No
hsa-mir-520e	8p21.3	PHYHIP	-4.17	-2.00	Phytanoyl-CoA 2-Hydroxylase Interacting Protein	No
hsa-mir-520h	4p15.2	CCDC149	-3.52	-4.77	Coiled-Coil Domain Containing	No
hsa-mir-520g	6q16.2	FAXC	-3.26	0.63	Failed Axon Connections Homolog	No
hsa-mir-520c	2q24	SLC25A12	-3.40	1.30	Solute Carrier Family 25	No
hsa-mir-1323	18q21.33	SERPINB5	-4.18		Serpin Peptidase Inhibitor, Clade B (Ovalbumin)	Yes
hsa-mir-523	16p13.2	ABAT	-4.20		4-Aminobutyrate Aminotransferase	No
hsa-mir-520b	8p21.3	PHYHIP	-3.74	-1.92	Phytanoyl-CoA 2-Hydroxylase Interacting Protein	No
hsa-mir-376b	12p12.1	BHLHE41	-6	-16.70	Basic Helix-Loop-Helix Family, Member E41	No
hsa-mir-376c	15q14-q15	CCNDBP1	-7.72	-0.84	Cyclin D-Type Binding-Protein 1	No
hsa-mir-372	18q11.2	KCTD1	-4.50	-0.55	Potassium Channel Tetramerization Domain	No
hsa-mir-580	2q12.3	SULT1C4	-4.21		Sulfotransferase Family, Cytosolic, 1C, Member 4	No
hsa-mir-944	8q23-q24	SNTB1	-5.21		Syntrophin, Beta 1 (Dystrophin-Associated)	No
hsa-mir-656	17q25.3	TMC6	-5.05	-0.41	Transmembrane Channel-Like	No
hsa-mir-655	3p21.31	PRKCD	-7.10		Protein Kinase C	Yes
hsa-mir-137	11p15.3	SCUBE2	-5.65	-0.41	hsa-mir-137	No
hsa-mir-653	10q11.22	ANXA8	-5.16		Annexin A8	Yes
hsa-mir-373	8q24.3	ADCK5	-3.57	-4.96	AarF Domain Containing Kinase	No
hsa-mir-551b	12q13.11	VDR	-7.03	-3.42	Vitamin D (1,25-Dihydroxyvitamin D3) Receptor	Yes
hsa-mir-570	7q33	CALD1	-5.85	-2.53	Caldesmon 1	No
hsa-mir-19a	3p21.31	FYCO1	-11.12	-13.78	FYVE And Coiled-Coil Domain Containing 1	No
hsa-mir-1277	6q25.2	SYNE1	-6.21		Spectrin Repeat Containing, Nuclear Envelope 11	No

Contuning table 2

miRNA	Location	Cancerminer	REC Score	Assoc. Score	Function	Involved in tumorigenesis
hsa-mir-215	14q22.1	FRMD6	-8.87	-11.44	FERM Domain Containing 61	No
hsa-mir-607	2q12.3	SULT1C4	-4.01		Sulfotransferase Family, Cytosolic, 1C	No
hsa-mir-371	15q26.3	LRRK1	-4.21	-4.85	Leucine-Rich Repeat Kinase 1	No
hsa-mir-144	7p14.1	SFRP4	-8.18	1.45	Secreted Frizzled-Related Protein	No
hsa-mir-518c	21q22.13	CLDN14	-3.72	-1.16	Claudin 14	No
hsa-mir-526b	19p13.3	NFIX	-4.36	-1.25	Nuclear Factor I/X (CCAAT-Binding	No
hsa-mir-517a	4p15.2	CCDC149	-3.26	-3.33	Coiled-Coil Domain Containing 149	No
hsa-mir-517b	19p13.3	NFIC	-3.23	-0.69	Nuclear Factor I/C (CCAAT-Binding	No
hsa-mir-520a	11p11.2	OR4B1	-4.12	-4.82	Olfactory Receptor, Family 4, Subfamily B	No
hsa-mir-518b	16q12.2	IRX5	-3.83	1.43	Iroquois Homeobox 51	Yes
hsa-mir-451	6q22.1	COL10A1	-7.25	0.36	Collagen, Type X, Alpha	No
hsa-mir-374a	2q31.1	HOXD8	-7.03	-1.34	Homeobox D8	Yes
hsa-mir-136	6q14.1	PHIP	-6.13	0.76	Pleckstrin Homology Domain Interacting Protein	Yes
hsa-mir-542	19q13.32	BBC3	-5.41	-7.19	BCL2 Binding Component 3	Yes
hsa-mir-889	16q22.1	TRADD	-7.26	-4.19	TNFRSF1A-Associated Via Death Domain	Yes
hsa-mir-424	22q13.1	CBX7	-6.83	-2.99	Chromobox Homolog 7	Yes
hsa-mir-495	18q23	HSBP1L1	-7.02		Heat Shock Factor Binding Protein 1-Like 11	No
hsa-mir-522	9q31.1	TMEM246	-3.95	-3.36	Transmembrane Protein 246	No
hsa-mir-369	2q13	PSD4	-6.68	1.18	Pleckstrin And Sec7 Domain Containing 4	No
hsa-mir-337	14q12	PSME2	-7.80	-4.14	Proteasome (Prosome) Activator Subunit 2	No
hsa-mir-217	2p23.3	RAB10	-4.90		RAB10, Member RAS Oncogene Family	No
hsa-mir-584	18q12.2	ZNF396	-5.40	-2.55	Zinc Finger Protein 396	No