

Table S1. The clinical characteristics of the patients in this study.

No.	Age	History	Stage	Grade
1	42	High grade Serous ovarian cancer	IVb	3
2	83	High grade Serous ovarian cancer	IV	3
3	57	High grade Serous ovarian cancer	IIIc	3
4	51	High grade Serous ovarian cancer	IIIc	3
5	68	High grade Serous ovarian cancer	IVb	3
6	49	High grade Serous ovarian cancer	IIIc	3
7	68	High grade Serous ovarian cancer	IIIc	3
8	75	High grade Serous ovarian cancer	IV	3
9	61	High grade Serous ovarian cancer	IIIc	3
10	56	High grade Serous ovarian cancer	IIIc	3

Table S2. The sequence of primers in the present study.

Gene		The sequence of primers (5'-3')
miR-501-3p	Forward	ACGCGTTCTCCTTACCATCCCTGA
	Reverse	CGATCTGGAAGTAACCCAAGCC
U6	Forward	CTCGCTTCGGCAGCACA
	Reverse	AACGCTTCACGAATTTGCGT

Table S3. The target genes of miR-501-3p predicted by databases including TargetScan, miRanda, TarBase, miRTarBase, miR2Disease, miRecords, and miRWalk.

miRNA name	target gene	miRNA name	target gene	miRNA name	target gene	miRNA name	target gene	miRNA name	target gene	miRNA name	target gene	miRNA name	target gene	miRNA name	target gene
hsa-miR-501-3p	AAMP	hsa-miR-501-3p	CARM1	hsa-miR-501-3p	DSCC1	hsa-miR-501-3p	H3F3B	hsa-miR-501-3p	MCL1	hsa-miR-501-3p	PEF1	hsa-miR-501-3p	SEC23IP	hsa-miR-501-3p	TIMM8A
hsa-miR-501-3p	ABCA12	hsa-miR-501-3p	CASC4	hsa-miR-501-3p	DSE	hsa-miR-501-3p	HCFC2	hsa-miR-501-3p	MCM2	hsa-miR-501-3p	PEG10	hsa-miR-501-3p	SEC24A	hsa-miR-501-3p	TJP1
hsa-miR-501-3p	ABCC2	hsa-miR-501-3p	CASP10	hsa-miR-501-3p	DSTYK	hsa-miR-501-3p	HDGFRP3	hsa-miR-501-3p	MCM4	hsa-miR-501-3p	PFKFB3	hsa-miR-501-3p	SEC63	hsa-miR-501-3p	TLCD2
hsa-miR-501-3p	ABHD3	hsa-miR-501-3p	CBLL1	hsa-miR-501-3p	DTWD2	hsa-miR-501-3p	HES5	hsa-miR-501-3p	MDM4	hsa-miR-501-3p	PFKL	hsa-miR-501-3p	SELE	hsa-miR-501-3p	TMEM106B
hsa-miR-501-3p	ABLIM1	hsa-miR-501-3p	CBX1	hsa-miR-501-3p	DUSP16	hsa-miR-501-3p	HGS	hsa-miR-501-3p	MED12L	hsa-miR-501-3p	PFN2	hsa-miR-501-3p	SEMA3C	hsa-miR-501-3p	TMEM123
hsa-miR-501-3p	ACTN1	hsa-miR-501-3p	CBX4	hsa-miR-501-3p	DUSP26	hsa-miR-501-3p	HGSNAT	hsa-miR-501-3p	MEF2A	hsa-miR-501-3p	PHKA1	hsa-miR-501-3p	SEMA5A	hsa-miR-501-3p	TMEM135
hsa-miR-501-3p	ACVR1B	hsa-miR-501-3p	CCDC141	hsa-miR-501-3p	DUSP4	hsa-miR-501-3p	HIF1A	hsa-miR-501-3p	MGAT1	hsa-miR-501-3p	PHOX2B	hsa-miR-501-3p	SENP2	hsa-miR-501-3p	TMEM2
hsa-miR-501-3p	ADAM12	hsa-miR-501-3p	CCDC170	hsa-miR-501-3p	E2F1	hsa-miR-501-3p	HLA-DRA	hsa-miR-501-3p	MGAT5	hsa-miR-501-3p	PHYKPL	hsa-miR-501-3p	SEPN1	hsa-miR-501-3p	TMEM245
hsa-miR-501-3p	ADAM28	hsa-miR-501-3p	CCDC40	hsa-miR-501-3p	E2F3	hsa-miR-501-3p	HMBOX1	hsa-miR-501-3p	MGEA5	hsa-miR-501-3p	PICALM	hsa-miR-501-3p	SEPSECS	hsa-miR-501-3p	TMX3
hsa-miR-501-3p	ADAMTS5	hsa-miR-501-3p	CCDC47	hsa-miR-501-3p	E2F7	hsa-miR-501-3p	HMGCS1	hsa-miR-501-3p	MICB	hsa-miR-501-3p	PIGA	hsa-miR-501-3p	SEPT11	hsa-miR-501-3p	TNFAIP8
hsa-miR-501-3p	ADAR	hsa-miR-501-3p	CCDC50	hsa-miR-501-3p	ECT2	hsa-miR-501-3p	HNRNPDL	hsa-miR-501-3p	MID1	hsa-miR-501-3p	PIK3R5	hsa-miR-501-3p	SEPT7	hsa-miR-501-3p	TNFRSF10A
hsa-miR-501-3p	ADC	hsa-miR-501-3p	CCDC77	hsa-miR-501-3p	EEA1	hsa-miR-501-3p	HNRNPK	hsa-miR-501-3p	MIDN	hsa-miR-501-3p	PIM2	hsa-miR-501-3p	SEPT9	hsa-miR-501-3p	TNP3
hsa-miR-501-3p	ADCY7	hsa-miR-501-3p	CCND2	hsa-miR-501-3p	EFCAB11	hsa-miR-501-3p	HNRNPU	hsa-miR-501-3p	MIER1	hsa-miR-501-3p	PLAGL2	hsa-miR-501-3p	SERAC1	hsa-miR-501-3p	TNNC1
hsa-miR-501-3p	ADIPOQ	hsa-miR-501-3p	CCNL2	hsa-miR-501-3p	EGLN1	hsa-miR-501-3p	HOMER2	hsa-miR-501-3p	MOC3	hsa-miR-501-3p	PLCB1	hsa-miR-501-3p	SERPBP1	hsa-miR-501-3p	TNRC6C
hsa-miR-501-3p	AFF4	hsa-miR-501-3p	CCP110	hsa-miR-501-3p	EIF4G1	hsa-miR-501-3p	HOXC13	hsa-miR-501-3p	MORC3	hsa-miR-501-3p	PLD3	hsa-miR-501-3p	SERPINE2	hsa-miR-501-3p	TOR1AIP1
hsa-miR-501-3p	AFG3L2	hsa-miR-501-3p	CCR9	hsa-miR-501-3p	EIF4G2	hsa-miR-501-3p	HOXD10	hsa-miR-501-3p	MPL	hsa-miR-501-3p	PLEKHA1	hsa-miR-501-3p	SERPAD2	hsa-miR-501-3p	TP53INP1
hsa-miR-501-3p	AGBL5	hsa-miR-501-3p	CD109	hsa-miR-501-3p	ELAVL2	hsa-miR-501-3p	HS2ST1	hsa-miR-501-3p	MPP6	hsa-miR-501-3p	PLEKHB2	hsa-miR-501-3p	SES1	hsa-miR-501-3p	TPK1
hsa-miR-501-3p	AGO1	hsa-miR-501-3p	CD200R1	hsa-miR-501-3p	ELK4	hsa-miR-501-3p	HSP90AB1	hsa-miR-501-3p	MRRF	hsa-miR-501-3p	PLK1	hsa-miR-501-3p	SESN3	hsa-miR-501-3p	TRDN
hsa-miR-501-3p	AHCYL1	hsa-miR-501-3p	CD83	hsa-miR-501-3p	ELL2	hsa-miR-501-3p	HSPA4	hsa-miR-501-3p	MSI1	hsa-miR-501-3p	PLS3	hsa-miR-501-3p	SETD5	hsa-miR-501-3p	TRIM44
hsa-miR-501-3p	AHRR	hsa-miR-501-3p	CDC27	hsa-miR-501-3p	ELMO1	hsa-miR-501-3p	HSPA5	hsa-miR-501-3p	MST4	hsa-miR-501-3p	PMAIP1	hsa-miR-501-3p	SETD7	hsa-miR-501-3p	TRIM5
hsa-miR-501-3p	AK2	hsa-miR-501-3p	CDC37	hsa-miR-501-3p	ELP2	hsa-miR-501-3p	IBA57	hsa-miR-501-3p	MSTN	hsa-miR-501-3p	PNPLA3	hsa-miR-501-3p	SF3A2	hsa-miR-501-3p	TRIM65
hsa-miR-501-3p	AKAP11	hsa-miR-501-3p	CDCA4	hsa-miR-501-3p	EML4	hsa-miR-501-3p	IDS	hsa-miR-501-3p	MTCH2	hsa-miR-501-3p	POU2F1	hsa-miR-501-3p	SH3GLB1	hsa-miR-501-3p	TRIM72
hsa-miR-501-3p	AKAP5	hsa-miR-501-3p	CDK6	hsa-miR-501-3p	EMP2	hsa-miR-501-3p	IER2	hsa-miR-501-3p	MTHFD2	hsa-miR-501-3p	PPARA	hsa-miR-501-3p	SH3PXD2A	hsa-miR-501-3p	TRMT10A
hsa-miR-501-3p	AKIRIN1	hsa-miR-501-3p	CDK9	hsa-miR-501-3p	ENTHD1	hsa-miR-501-3p	IL21R	hsa-miR-501-3p	MTPN	hsa-miR-501-3p	PPP1R15B	hsa-miR-501-3p	SIGLEC15	hsa-miR-501-3p	TROVE2
hsa-miR-501-3p	AKT1	hsa-miR-501-3p	CDKN1B	hsa-miR-501-3p	ENTPD7	hsa-miR-501-3p	IL24	hsa-miR-501-3p	MTR	hsa-miR-501-3p	PPP1R3C	hsa-miR-501-3p	SIX4	hsa-miR-501-3p	TRPA1
hsa-miR-501-3p	ALDH18A1	hsa-miR-501-3p	CDKN2B	hsa-miR-501-3p	EPAS1	hsa-miR-501-3p	INIP	hsa-miR-501-3p	MYCN	hsa-miR-501-3p	PPP2R2C	hsa-miR-501-3p	SKIL	hsa-miR-501-3p	TRPS1
hsa-miR-501-3p	ALDH1L2	hsa-miR-501-3p	CDV3	hsa-miR-501-3p	EPDR1	hsa-miR-501-3p	INPP4A	hsa-miR-501-3p	MYLIP	hsa-miR-501-3p	PPP4R2	hsa-miR-501-3p	SLA2	hsa-miR-501-3p	TSPAN4
hsa-miR-501-3p	AMN1	hsa-miR-501-3p	CEACAM1	hsa-miR-501-3p	EPHB2	hsa-miR-501-3p	INPP5F	hsa-miR-501-3p	MYO3B	hsa-miR-501-3p	PPP6C	hsa-miR-501-3p	SLC1A4	hsa-miR-501-3p	TSPEAR
hsa-miR-501-3p	ANKFY1	hsa-miR-501-3p	CENPQ	hsa-miR-501-3p	EPN2	hsa-miR-501-3p	INSIG1	hsa-miR-501-3p	MYOZ3	hsa-miR-501-3p	PRG2	hsa-miR-501-3p	SLC25A13	hsa-miR-501-3p	TTC37
hsa-miR-501-3p	ANKRD13A	hsa-miR-501-3p	ANKRD13A	hsa-miR-501-3p	CEP19	hsa-miR-501-3p	IQSEC1	hsa-miR-501-3p	NAA11	hsa-miR-501-3p	PRICKLE2	hsa-miR-501-3p	SLC25A36	hsa-miR-501-3p	TLL5
hsa-miR-501-3p	ANKRD46	hsa-miR-501-3p	CERS6	hsa-miR-501-3p	ERC2	hsa-miR-501-3p	IRAK3	hsa-miR-501-3p	NAA30	hsa-miR-501-3p	PRKD3	hsa-miR-501-3p	SLC2A12	hsa-miR-501-3p	TUB
hsa-miR-501-3p	ANKRD50	hsa-miR-501-3p	CHD6	hsa-miR-501-3p	ERO1LB	hsa-miR-501-3p	IRF1	hsa-miR-501-3p	NAA40	hsa-miR-501-3p	PRKX	hsa-miR-501-3p	SLC30A8	hsa-miR-501-3p	TULP4
hsa-miR-501-3p	ANP32E	hsa-miR-501-3p	CHKA	hsa-miR-501-3p	ESRRG	hsa-miR-501-3p	IRF4	hsa-miR-501-3p	NAA60	hsa-miR-501-3p	PRPF40A	hsa-miR-501-3p	SLC35A1	hsa-miR-501-3p	TUSC1
hsa-miR-501-3p	AP1G1	hsa-miR-501-3p	CHML	hsa-miR-501-3p	ETNK1	hsa-miR-501-3p	IRGQ	hsa-miR-501-3p	NAB1	hsa-miR-501-3p	PRPH2	hsa-miR-501-3p	SLC35E1	hsa-miR-501-3p	TXLNA
hsa-miR-501-3p	AP3F1	hsa-miR-501-3p	CHMP1B	hsa-miR-501-3p	EZH2	hsa-miR-501-3p	ITGA3	hsa-miR-501-3p	NAE1	hsa-miR-501-3p	PSMB4	hsa-miR-501-3p	SLC38A1	hsa-miR-501-3p	UBA6
hsa-miR-501-3p	APAF1	hsa-miR-501-3p	CHODL	hsa-miR-501-3p	F3	hsa-miR-501-3p	ITGA9	hsa-miR-501-3p	NAP1L5	hsa-miR-501-3p	PSMD6	hsa-miR-501-3p	SLC39A14	hsa-miR-501-3p	UBE2H
hsa-miR-501-3p	APH1A	hsa-miR-501-3p	CHST13	hsa-miR-501-3p	F8	hsa-miR-501-3p	ITGAV	hsa-miR-501-3p	NAT8L	hsa-miR-501-3p	PSMG1	hsa-miR-501-3p	SLC5A1	hsa-miR-501-3p	UBE2N
hsa-miR-501-3p	APOL1	hsa-miR-501-3p	CIT	hsa-miR-501-3p	FAM120C	hsa-miR-501-3p	ITGB3BP	hsa-miR-501-3p	NBEA	hsa-miR-501-3p	PTGDR2	hsa-miR-501-3p	SLC6A20	hsa-miR-501-3p	UBE2V1
hsa-miR-501-3p	APOL2	hsa-miR-501-3p	CLASP1	hsa-miR-501-3p	FAM129A	hsa-miR-501-3p	ITM2B	hsa-miR-501-3p	NBR1	hsa-miR-501-3p	PTGS2	hsa-miR-501-3p	SLC6A8	hsa-miR-501-3p	UBE2W
hsa-miR-501-3p	APOL4	hsa-miR-501-3p	CLDN11	hsa-miR-501-3p	FAM177A1	hsa-miR-501-3p	JADE1	hsa-miR-501-3p	NCAPD2	hsa-miR-501-3p	PTPA1	hsa-miR-501-3p	SLC7A1	hsa-miR-501-3p	UBL3
hsa-miR-501-3p	ARHGFE10	hsa-miR-501-3p	ARHGFE10	hsa-miR-501-3p	FAM208B	hsa-miR-501-3p	JAZF1	hsa-miR-501-3p	NCAPG2	hsa-miR-501-3p	PTPN12	hsa-miR-501-3p	SLC7A14	hsa-miR-501-3p	UBL4A
hsa-miR-501-3p	ARHGFE15	hsa-miR-501-3p	CLIC4	hsa-miR-501-3p	FAM217B	hsa-miR-501-3p	KCNA1	hsa-miR-501-3p	NCKAP1	hsa-miR-501-3p	PTPN4	hsa-miR-501-3p	SLC9A7	hsa-miR-501-3p	UBQLN1
hsa-miR-501-3p	ARID5B	hsa-miR-501-3p	CLN5	hsa-miR-501-3p	FAM219B	hsa-miR-501-3p	KCNC3	hsa-miR-501-3p	NCOA4	hsa-miR-501-3p	PTPRK	hsa-miR-501-3p	SMC3	hsa-miR-501-3p	UBR7
hsa-miR-501-3p	ARL4C	hsa-miR-501-3p	CLNS1A	hsa-miR-501-3p	FAM49B	hsa-miR-501-3p	KCNJ6	hsa-miR-501-3p	NDRG1	hsa-miR-501-3p	PURA	hsa-miR-501-3p	SMG1	hsa-miR-501-3p	UCP3
hsa-miR-501-3p	ARL6IP1	hsa-miR-501-3p	CNBP	hsa-miR-501-3p	FAM91A1	hsa-miR-501-3p	KCNT1	hsa-miR-501-3p	NDS1	hsa-miR-501-3p	PYHIN1	hsa-miR-501-3p	SMG5	hsa-miR-501-3p	UGT2B10
hsa-miR-501-3p	ARL8B	hsa-miR-501-3p	CNDP2	hsa-miR-501-3p	FBN2	hsa-miR-501-3p	KCTD20	hsa-miR-501-3p	NEFM	hsa-miR-501-3p	QSER1	hsa-miR-501-3p	SMIM13	hsa-miR-501-3p	UNC45B
hsa-miR-501-3p	ARMC10	hsa-miR-501-3p	CNIH1	hsa-miR-501-3p	FBXO3	hsa-miR-501-3p	KDSR	hsa-miR-501-3p	NEK7	hsa-miR-501-3p	R3HDM2	hsa-miR-501-3p	SMIM14	hsa-miR-501-3p	UNC50
hsa-miR-501-3p	ARPC1B	hsa-miR-501-3p	CNOT4	hsa-miR-501-3p	FBXO4	hsa-miR-501-3p	KIAA0040	hsa-miR-501-3p	NF1	hsa-miR-501-3p	RAB11FIP3	hsa-miR-501-3p	SMIM17	hsa-miR-501-3p	USP14
hsa-miR-501-3p	ASAP1	hsa-miR-501-3p	CNOT6	hsa-miR-501-3p	FBXO5	hsa-miR-501-3p	KIAA1462	hsa-miR-501-3p	NFAT5	hsa-miR-501-3p	RAB3GAP2	hsa-miR-501-3p	SNRPD3	hsa-miR-501-3p	USP35
hsa-miR-501-3p	ASF1A	hsa-miR-501-3p	COL10A1	hsa-miR-501-3p	FCGR1A	hsa-miR-501-3p	KIAA1549	hsa-miR-501-3p	NFIB	hsa-miR-501-3p	RAB5B	hsa-miR-501-3p	SNX19	hsa-miR-501-3p	USPL1
hsa-miR-501-3p	ATF7IP	hsa-miR-501-3p	COL12A1	hsa-miR-501-3p	FCN2	hsa-miR-501-3p	KIF21A	hsa-miR-501-3p	NIPAL4	hsa-miR-501-3p	RAB6A	hsa-miR-501-3p	SNX22	hsa-miR-501-3p	UTP14C
hsa-miR-501-3p	ATF7IP2	hsa-miR-501-3p	COL23A1	hsa-miR-501-3p	FDXR	hsa-miR-501-3p	KIF5B	hsa-miR-501-3p	NLGN4X	hsa-miR-501-3p	RAD21	hsa-miR-501-3p	SOC56	hsa-miR-501-3p	WDR44
hsa-miR-501-3p	ATIC	hsa-miR-501-3p	COL25A1	hsa-miR-501-3p	FECH	hsa-miR-501-3p	KLF6	hsa-miR-501-3p	NME6	hsa-miR-501-3p	RAD23B	hsa-miR-501-3p	SOC57	hsa-miR-501-3p	WDR82P1

hsa-miR-501-3p	ATL1	hsa-miR-501-3p	COL4A3	hsa-miR-501-3p	FGF23	hsa-miR-501-3p	KLHL13	hsa-miR-501-3p	NOL8	hsa-miR-501-3p	RAD51C	hsa-miR-501-3p	SOD2	hsa-miR-501-3p	WEE1
hsa-miR-501-3p	ATP1B1	hsa-miR-501-3p	COL5A1	hsa-miR-501-3p	FGF9	hsa-miR-501-3p	KLHL14	hsa-miR-501-3p	NONO	hsa-miR-501-3p	RAI2	hsa-miR-501-3p	SON	hsa-miR-501-3p	WNK1
hsa-miR-501-3p	ATP2A2	hsa-miR-501-3p	COQ10B	hsa-miR-501-3p	FGFR1OP	hsa-miR-501-3p	KLK2	hsa-miR-501-3p	NOS1AP	hsa-miR-501-3p	RAPGEF2	hsa-miR-501-3p	SP7	hsa-miR-501-3p	WSB1
hsa-miR-501-3p	ATP2B1	hsa-miR-501-3p	CPNE3	hsa-miR-501-3p	FXJ1	hsa-miR-501-3p	KLLN	hsa-miR-501-3p	NOTCH4	hsa-miR-501-3p	RAPGEF6	hsa-miR-501-3p	SPCS3	hsa-miR-501-3p	WWC1
hsa-miR-501-3p	ATP6V1B2	hsa-miR-501-3p	CREBZF	hsa-miR-501-3p	FKTN	hsa-miR-501-3p	KMO	hsa-miR-501-3p	NOV	hsa-miR-501-3p	RASGRF2	hsa-miR-501-3p	SPOCK1	hsa-miR-501-3p	XPC
hsa-miR-501-3p	ATP7B	hsa-miR-501-3p	CRK	hsa-miR-501-3p	FNIP1	hsa-miR-501-3p	KRAS	hsa-miR-501-3p	NPC2	hsa-miR-501-3p	RASSF3	hsa-miR-501-3p	SPTBN1	hsa-miR-501-3p	XPO1
hsa-miR-501-3p	ATP8A2	hsa-miR-501-3p	CRKL	hsa-miR-501-3p	FOS	hsa-miR-501-3p	KRT85	hsa-miR-501-3p	NPHS1	hsa-miR-501-3p	RASSF5	hsa-miR-501-3p	SPTSSA	hsa-miR-501-3p	XRCC1
hsa-miR-501-3p	ATXN1	hsa-miR-501-3p	CRTC3	hsa-miR-501-3p	FOXJ3	hsa-miR-501-3p	LARS	hsa-miR-501-3p	NPTX1	hsa-miR-501-3p	RBM12B	hsa-miR-501-3p	SRSF3	hsa-miR-501-3p	YPEL2
hsa-miR-501-3p	AURKB	hsa-miR-501-3p	CSK	hsa-miR-501-3p	FOXO1	hsa-miR-501-3p	LATS1	hsa-miR-501-3p	NPTXR	hsa-miR-501-3p	RBM3	hsa-miR-501-3p	SS18L1	hsa-miR-501-3p	YTHDF3
hsa-miR-501-3p	BACE2	hsa-miR-501-3p	CSNK1A1	hsa-miR-501-3p	FOXP2	hsa-miR-501-3p	LBP	hsa-miR-501-3p	NR1D2	hsa-miR-501-3p	RC3H1	hsa-miR-501-3p	SSH1	hsa-miR-501-3p	YWHAQ
hsa-miR-501-3p	BAZ1B	hsa-miR-501-3p	CSRP1	hsa-miR-501-3p	FRMD6	hsa-miR-501-3p	LCOR	hsa-miR-501-3p	NR2C2	hsa-miR-501-3p	RCC2	hsa-miR-501-3p	SSR3	hsa-miR-501-3p	ZBTB10
hsa-miR-501-3p	BBS10	hsa-miR-501-3p	CSTB	hsa-miR-501-3p	FRS2	hsa-miR-501-3p	LDHA	hsa-miR-501-3p	NRAS	hsa-miR-501-3p	RCHY1	hsa-miR-501-3p	SSTR1	hsa-miR-501-3p	ZBTB11
hsa-miR-501-3p	BCAT2	hsa-miR-501-3p	CTBP1	hsa-miR-501-3p	FUT6	hsa-miR-501-3p	LDHB	hsa-miR-501-3p	NRBF2	hsa-miR-501-3p	RCOR1	hsa-miR-501-3p	SSX1	hsa-miR-501-3p	ZBTB18
hsa-miR-501-3p	BCL2	hsa-miR-501-3p	CTNND1	hsa-miR-501-3p	G6PC	hsa-miR-501-3p	LDLR	hsa-miR-501-3p	NRIP1	hsa-miR-501-3p	REV3L	hsa-miR-501-3p	SSX2IP	hsa-miR-501-3p	ZBTB33
hsa-miR-501-3p	BCOR	hsa-miR-501-3p	CTPS1	hsa-miR-501-3p	GABARAPL	hsa-miR-501-3p	LIFR	hsa-miR-501-3p	NTNG1	hsa-miR-501-3p	RHOA	hsa-miR-501-3p	SSX3	hsa-miR-501-3p	ZBTB43
hsa-miR-501-3p	BDP1	hsa-miR-501-3p	CITN	hsa-miR-501-3p	GABPB2	hsa-miR-501-3p	LIG4	hsa-miR-501-3p	NUDT16L1	hsa-miR-501-3p	RIMS1	hsa-miR-501-3p	ST8SIA5	hsa-miR-501-3p	ZC3H12C
hsa-miR-501-3p	BHLHE22	hsa-miR-501-3p	CYP27C1	hsa-miR-501-3p	GAN	hsa-miR-501-3p	LINC00632	hsa-miR-501-3p	NUFIP2	hsa-miR-501-3p	RIN2	hsa-miR-501-3p	STAG2	hsa-miR-501-3p	ZC4H2
hsa-miR-501-3p	BHLHE41	hsa-miR-501-3p	CYP2U1	hsa-miR-501-3p	GATAD1	hsa-miR-501-3p	LINC00955	hsa-miR-501-3p	NUPL1	hsa-miR-501-3p	RLF	hsa-miR-501-3p	STARD7	hsa-miR-501-3p	ZCCHC14
hsa-miR-501-3p	BHMT2	hsa-miR-501-3p	CYP39A1	hsa-miR-501-3p	GDF6	hsa-miR-501-3p	LIPA	hsa-miR-501-3p	NXT2	hsa-miR-501-3p	RNF149	hsa-miR-501-3p	STAT2	hsa-miR-501-3p	ZDHHC15
hsa-miR-501-3p	BICD2	hsa-miR-501-3p	CYP4F11	hsa-miR-501-3p	GDNF	hsa-miR-501-3p	LITAF	hsa-miR-501-3p	OCFRL1	hsa-miR-501-3p	RNMT	hsa-miR-501-3p	STAT3	hsa-miR-501-3p	ZDHHC4
hsa-miR-501-3p	BMP7	hsa-miR-501-3p	DAG1	hsa-miR-501-3p	GIPR	hsa-miR-501-3p	LMNB2	hsa-miR-501-3p	OGT	hsa-miR-501-3p	RPH3AL	hsa-miR-501-3p	STIM2	hsa-miR-501-3p	ZFP91
hsa-miR-501-3p	BMPER	hsa-miR-501-3p	DAP	hsa-miR-501-3p	GJA1	hsa-miR-501-3p	LOX	hsa-miR-501-3p	OIP5	hsa-miR-501-3p	RPL15	hsa-miR-501-3p	STK17A	hsa-miR-501-3p	ZIC4
hsa-miR-501-3p	BNIP3	hsa-miR-501-3p	DAPK1	hsa-miR-501-3p	GJA3	hsa-miR-501-3p	LPHN1	hsa-miR-501-3p	OLIG2	hsa-miR-501-3p	RPL4	hsa-miR-501-3p	STK38	hsa-miR-501-3p	ZMAT2
hsa-miR-501-3p	BRAF	hsa-miR-501-3p	DAPP1	hsa-miR-501-3p	GJD3	hsa-miR-501-3p	LPIN1	hsa-miR-501-3p	OPCML	hsa-miR-501-3p	RPRD1B	hsa-miR-501-3p	SUB1	hsa-miR-501-3p	ZMAT3
hsa-miR-501-3p	BRD2	hsa-miR-501-3p	DCAF7	hsa-miR-501-3p	GLCCII	hsa-miR-501-3p	LPL	hsa-miR-501-3p	OPN3	hsa-miR-501-3p	RPS29	hsa-miR-501-3p	SUDS3	hsa-miR-501-3p	ZMYM2
hsa-miR-501-3p	BRD4	hsa-miR-501-3p	DCAF8	hsa-miR-501-3p	GLI2	hsa-miR-501-3p	LPP	hsa-miR-501-3p	ORC6	hsa-miR-501-3p	RPS3	hsa-miR-501-3p	SUFU	hsa-miR-501-3p	ZNF219
hsa-miR-501-3p	BRWD1	hsa-miR-501-3p	DCP2	hsa-miR-501-3p	GLS2	hsa-miR-501-3p	LRIT3	hsa-miR-501-3p	OSER1	hsa-miR-501-3p	RPS4Y1	hsa-miR-501-3p	SUMF1	hsa-miR-501-3p	ZNF264
hsa-miR-501-3p	BRWD3	hsa-miR-501-3p	DDHD2	hsa-miR-501-3p	GM2A	hsa-miR-501-3p	LRRC58	hsa-miR-501-3p	OTUD4	hsa-miR-501-3p	RQCD1	hsa-miR-501-3p	SUMO1	hsa-miR-501-3p	ZNF367
hsa-miR-501-3p	BSPRY	hsa-miR-501-3p	DDX24	hsa-miR-501-3p	GNAQ	hsa-miR-501-3p	LRRC59	hsa-miR-501-3p	P2RX1	hsa-miR-501-3p	RRM2B	hsa-miR-501-3p	SYK	hsa-miR-501-3p	ZNF460
hsa-miR-501-3p	BTBD7	hsa-miR-501-3p	DDX3X	hsa-miR-501-3p	GNB1	hsa-miR-501-3p	LRRC8B	hsa-miR-501-3p	PACS1	hsa-miR-501-3p	RSBN1	hsa-miR-501-3p	SYT1	hsa-miR-501-3p	ZNF473
hsa-miR-501-3p	BTF3L4	hsa-miR-501-3p	DDX54	hsa-miR-501-3p	GNPNAT1	hsa-miR-501-3p	LSM4	hsa-miR-501-3p	PAFAH1B1	hsa-miR-501-3p	RSBN1L	hsa-miR-501-3p	SYTL4	hsa-miR-501-3p	ZNF503
hsa-miR-501-3p	BTG3	hsa-miR-501-3p	DENND4B	hsa-miR-501-3p	GOLT1A	hsa-miR-501-3p	LYRM7	hsa-miR-501-3p	PAFAH1B2	hsa-miR-501-3p	RUNXIT1	hsa-miR-501-3p	TAB3	hsa-miR-501-3p	ZNF574
hsa-miR-501-3p	C10orf54	hsa-miR-501-3p	DENR	hsa-miR-501-3p	GOPC	hsa-miR-501-3p	LYSMD3	hsa-miR-501-3p	PANK3	hsa-miR-501-3p	RYBP	hsa-miR-501-3p	TAF9	hsa-miR-501-3p	ZNF605
hsa-miR-501-3p	C11orf58	hsa-miR-501-3p	DGKB	hsa-miR-501-3p	GP6	hsa-miR-501-3p	LZTR1	hsa-miR-501-3p	PARL	hsa-miR-501-3p	S100A11	hsa-miR-501-3p	TAOK1	hsa-miR-501-3p	ZNF644
hsa-miR-501-3p	C1orf131	hsa-miR-501-3p	DHX33	hsa-miR-501-3p	GPBP1L1	hsa-miR-501-3p	MAB21L1	hsa-miR-501-3p	PATL1	hsa-miR-501-3p	S100PBP	hsa-miR-501-3p	TAOK3	hsa-miR-501-3p	ZNF655
hsa-miR-501-3p	C1orf52	hsa-miR-501-3p	DHX40	hsa-miR-501-3p	GPD1L	hsa-miR-501-3p	MAGED2	hsa-miR-501-3p	PAX9	hsa-miR-501-3p	SACS	hsa-miR-501-3p	TARDBP	hsa-miR-501-3p	ZNF664
hsa-miR-501-3p	C2orf43	hsa-miR-501-3p	DIAPH1	hsa-miR-501-3p	GPLD1	hsa-miR-501-3p	MANBAL	hsa-miR-501-3p	PCDHB16	hsa-miR-501-3p	SAE1	hsa-miR-501-3p	TBC1D15	hsa-miR-501-3p	ZNF674
hsa-miR-501-3p	C4orf26	hsa-miR-501-3p	DLG2	hsa-miR-501-3p	GPR160	hsa-miR-501-3p	MAP4K3	hsa-miR-501-3p	PCGF3	hsa-miR-501-3p	SAMSN1	hsa-miR-501-3p	TBC1D20	hsa-miR-501-3p	ZNF714
hsa-miR-501-3p	C8orf33	hsa-miR-501-3p	DLGAP2	hsa-miR-501-3p	GREB1L	hsa-miR-501-3p	MAPK1	hsa-miR-501-3p	PCNXL4	hsa-miR-501-3p	SBNO1	hsa-miR-501-3p	TBCC	hsa-miR-501-3p	ZNF827
hsa-miR-501-3p	C8orf37	hsa-miR-501-3p	DMXL2	hsa-miR-501-3p	GRIK4	hsa-miR-501-3p	MAPK11P1L	hsa-miR-501-3p	PCSK6	hsa-miR-501-3p	SCAF11	hsa-miR-501-3p	TBL1XR1	hsa-miR-501-3p	ZXDB
hsa-miR-501-3p	C9orf72	hsa-miR-501-3p	DNAJB14	hsa-miR-501-3p	GRM1	hsa-miR-501-3p	MAPKAPK2	hsa-miR-501-3p	PCSK9	hsa-miR-501-3p	SCN2A	hsa-miR-501-3p	TCEAL4	hsa-miR-501-3p	
hsa-miR-501-3p	CA12	hsa-miR-501-3p	DNAJC19	hsa-miR-501-3p	GRM6	hsa-miR-501-3p	MARCH6	hsa-miR-501-3p	PDE4C	hsa-miR-501-3p	SCN2B	hsa-miR-501-3p	TCF7	hsa-miR-501-3p	
hsa-miR-501-3p	CALM3	hsa-miR-501-3p	DOCK8	hsa-miR-501-3p	GSK3B	hsa-miR-501-3p	MARCKS	hsa-miR-501-3p	PDIA6	hsa-miR-501-3p	SCN3A	hsa-miR-501-3p	TDP2	hsa-miR-501-3p	
hsa-miR-501-3p	CAMKK2	hsa-miR-501-3p	DOK1	hsa-miR-501-3p	GTF2E1	hsa-miR-501-3p	MBL2	hsa-miR-501-3p	PDIK1L	hsa-miR-501-3p	SCN4B	hsa-miR-501-3p	TENM2	hsa-miR-501-3p	
hsa-miR-501-3p	CAMTA1	hsa-miR-501-3p	DPEP3	hsa-miR-501-3p	GTPBP2	hsa-miR-501-3p	MBNL1	hsa-miR-501-3p	PDLIM5	hsa-miR-501-3p	SCO1	hsa-miR-501-3p	TET3	hsa-miR-501-3p	
hsa-miR-501-3p	CANX	hsa-miR-501-3p	DPH6	hsa-miR-501-3p	GUCD1	hsa-miR-501-3p	MBTD1	hsa-miR-501-3p	PDP2	hsa-miR-501-3p	SCRIB	hsa-miR-501-3p	TFCP2L1	hsa-miR-501-3p	
hsa-miR-501-3p	CARD8	hsa-miR-501-3p	DRD1	hsa-miR-501-3p	GXYLT1	hsa-miR-501-3p	MCC	hsa-miR-501-3p	PDZD2	hsa-miR-501-3p	SEC11C	hsa-miR-501-3p	TGOLN2	hsa-miR-501-3p	

Table S4. The down regulated genes in OC from GSE14407.

Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names	Gene names
LOC101928554	WFDC2	SYT13	ELOVL6	LEMD1	ARHGAP8	RGS16	KIAA1524	PKD1L1	CLEC18A	MAGEA11	UNC5C	LIPH	TJP3	GRIA2	
CENPF	SNF	AURKA	ADGRL4	CX3CL1	STON2	DIP2A	EHF	MND1	PLEKHA5	SYCN	ZAP70	HCRT	LOC100506411	SMC4	
SPON1	DTL	RALGAPB	PTH2R	STC2	RAB26	SYTL1	LDB1	TCIRG1	HIST1H3F	TMEM61	SLC5A12	TRMT1	COL5A1	CERS1	
OVOS2	SPAG11A	LOC105379499	LIMK1	CKAP2L	RAPGEF3	VCAN	AHRR	CHPF2	DIAPH3	LOC100506472	INTS4	CLDN4	DUXAP10	PRSS33	
DTL	KIAA1217	CSPG5	CD24	TOP2A	ALOX12P2	EXOSC4	DUSP2	DIRAS2	CAPN12	NOCT	DPEP3	TNFRSF25	HIST1H1T	TLR8-AS1	
MUC1	CBX2	GIN52	EPCAM	ECT2	SCNN1A	ZEB1	MARVELD1	SNHG17	DGKK	TMTC1	CALCA	DLGAP5	ABI3BP	PTPN23	
BUB1B	MICALL2	CENPU	ULK1	NRTN	HLA-DOB	FLT1	RTFDC1	GPSM2	TM4SF18	RGS1	UGT8	LINC01419	HELLS	AJAP1	
CDCA3	C1orf106	NEIL3	KCNMB3	MSTO2P	DNA2	FRMD8	ENG	GET4	IBSP	ZNF257	GLYAT	SGK494	LOC101928847	NR5A2	
MCM10	CP	OIP5	TROAP	OR7E12P	NTN5	TSPAN12	CSPG4	CHMP4C	FUT8-AS1	MAGEA4	CCDC88C	L3MBTL1	FAM71F1	KLF14	
LOC100129098	FAM69B	PSRC1	THSD4	EFNA3	FGD5	PTPRC	ST6GALNAC2	LOC286178	C9orf16	TRA2A	POFUT1	TAF6L	NTS	GCAT	
ZWINT	TTK	CDYL	BIRC5	KLK6	RDM1	ELF3	HIGD1B	DEFB126	RAPGEF5	FAM107A	PATZ1	SYK	MDK	MAGEC1	
PTTG3P	CELSR3	FANCD2	CD24	CFL1	AGFG2	LOC100507334	UHRF1BP1	ST8SIA2	TBX1	LOC101060391	WDR72	LOC102725343	LYPD6B	KCCAT333	
ZIC1	RM12	PRIMA1	RNF183	GPR158	HAPLN1	EHF	EPHX4	ATAD5	CDCA2	LCN12	AGMAT	C3orf30	CSNK1E	CST5	
SPON1	PLEKHG2	MELK	CDCA5	ORAOV1	SST	DEFB1	LINC01558	CASKIN1	NEAT1	DELMOD2	FAM149B1	GPR39	COL9A1	RHEB	
IQGAP3	PCDH19	PTX3	KAZALD1	CDH6	SEC61A2	GALNT6	MAPK12	BCL11A	C1orf186	ESAM	HDAC7	LCAL1	TFR2	HCG8	
S100A1	MIR24-2	SEMA3F	COL12A1	FRYL	CLDN3	KDM4C	PCDHB8	HOXB7	POTEM	CYP26B1	D21S2090E	MTG2	SDC3	UGT2B17	
LRP8	PSAT1	MAL	RC3H1	ZNF592	VCAN	KIF15	ESCO2	PPM1H	F2RL1	HMGA2	THRSP	LOC100288966	ADAMTS14	IGFBP3	
NUSAP1	BBOX1-AS1	TMEFF2	PAQR4	RNFT2	LIX1	LOC285043	LOC374890	IGFBP2	MYLPF	DIS3L2	VP59D1	ZSCAN4	LINC00494	SYCP2	
SLC4A11	LZTS3	MECOM	KCNT1	LINC01297	PRSS2	CLRN1	SEMA5B	PPARD	CT55	RNF212	MPZL2	HSPG2	NPSR1-AS1	LINC00458	
KLK7	MTFR2	L1CAM	CD93	FGF18	KCNN2	TRPM1	CADPS	WFDC10B	LIPG	DEPDC1B	HMH1B1	PTGES3L	PAX8	LRRC37A8P	
APOLD1	LZTS1	ADGRG1	TMEM44	TAZ	C6orf223	GPM6B	GPR160	KLK7	NRSN1	LOC100507634	NME8	PAX8	RNASE11	KIFC2	
ESPL1	MREG	SLC52A2	FOXM1	FJX1	CYP27B1	FAM155B	DNAJC13	TBX2	LOC100505938	TERB2	SBK1	NUSAP1	CUX2	OR9A1P	
XO17	SCRIB	CD20	ESM1	TMTC1	HIST1H2BD	E2F1	DUXAP8	ELF3	GART	CXCL14	IGHV7-81	CCDC88C	C12orf40	F2RL2	
KIF20A	UHRF1	ESRP1	SZT2	PNMA3	DLX6-AS1	ATP2A1-AS1	VMA21	CENPE	LOC79160	NRXN1	ZNF365	CENPN	DACH1	LPAR3	
VEGFA	CDC25A	SEC61A1	CTPS2	ZC2HC1B	MMP11	CENPN	MAP4K1	ITGB2-AS1	MUC16	METTL7B	WNK2	SMIM21	LINC00265	HAPLN4	
SLC2A1	SPAG5	RRM2	LINC01215	RASAL1	RAB26	AATK	C21orf58	MMP7	NRN1	HLA-DOA	NR5A2	LETM1	GPAT2	MVB12A	
NEK2	GLI4	GAS2L3	WFDC1	E2F7	PACSIN1	MCM4	LOC100996345	C22orf42	LOC101929988	STX17-AS1	MARS	PMS2P2	ATP6V1B1	LIFR-AS1	
RRM2	PRC1	MKI67	RAD51AP1	MYO3B	PROM2	SLC6A8	MACC1	TAS2R39	PACSIN3	ZIC1	SLC1A7	KCNK10	KLHL22	ZFAND2B	
SPON1	FAM83D	LOC105369635	SHANK3	LOC648987	OCA2	PPP1R14B	F11	MMP1	FBXL17	LINC01405	LOC286359	SCNN1G	HTR2C	LOC728485	
ESPL1	NUF2	FAM171A1	SYNM	CD82	PAX8	HK2	LINC01312	COL22A1	CDK1	HAP1	RPS6KA4	TFDP1	SNHG4	SCGB1D2	
PRAME	SULT1C2	RNPEPL1	SPC25	ZNF627	PLXND1	ARID4B	KAAG1	TYRP1	HIGD2A	LOC100506797	SLCO1A2	HOXB4	NCOR1	C2orf88	
KIF18B	CD24	POLG	FILIP1	GPR19	LHX1	LRRC32	AJAP1	CD24	NEAT1	PPP4R1L	HPDL	C11orf80	TIGIT	CCDC169	
DEPDC1	BLM	MCM10	HDGF	ALPK3	KNL1	IQSEC3	LYNX1	ZNF391	SLC13A5	ITGA7	LARGE1	STYK1	ASPM	IL23A	
TPX2	NOX4	HMMR	DEPDC1	CENPK	MIR155	SULT1C2	KIF1A	TFE3	LINC00563	LYG1	DCDC2	HIP1R	BTNL9	BAIAP2	
BIRC5	SLC26A7	STIL	CDH6	APLNR	ADAM5	FOLR3	OLFML2A	STON2	TBC1D5	LINC00184	SCAF4	BAZZA	C10orf99	FZD10-AS1	
CDT1	C1orf186	CDK1	CP	COL4A1	ARHGEF39	ASPM	MTBP	SUSD2	LOC105369705	C16orf59	DUXAP10	WDR97	PCDH7	MECOM	
KIF4A	GIN54	ATAD2	SLC34A2	PGGHG	GJB3	MAGEA1	MAP4K1	BHLHA15	KCNK12	KMT2E-AS1	S100A4	LOC339622	CDH18	CCDC74B	
KIF2C	SOX17	VDR	LINC00523	KIF23	TRAF4	ALS2CR11	CLUH	NCAM1	AGFG1	FAM47B	CDSN	UGT2B4	LINC00673	XPNPEP2	
NCAPG	FAM64A	OR7E37P	LOC100130502	TK1	RPARP-AS1	LINC01333	SKIL	LOC100505782	COL13A1	SSX4B	SLC45A2	OFCC1	FGFR2	LOC399900	
AURKA	XKR4	CHEK1	CDH6	MROH1	CEMIP	CACNA1D	LOC100506274	SULT1C2	C22orf34	LOC101928014	FLG	LOC613266	SIX1	HOXB7	
ORC6	MYO10	GIN51	PLAC1	NUP210	KRTAP4-1	DGAT1	ESRG	MYO10	VMA21	ATP10B	PAQR6	LINC00664	HIST1H2AH	NAGLU	
MKI67	TIMELESS	DUXAP10	DIRAS2	NOTCH3	LOC105376796	MXD3	SIPA1L3	USF28	AURKB	SOX11	ARPP21	DOCK9	DIAPH3	MEGF10	
C12orf56	CXXC5	TSPAN12	NEAT1	UCP2	PABPC1	ASMTL-AS1	MAPKAPK2	C3orf80	ACSM2A	CPEB3	APOA1	HAPLN1	RANGAP1	SOX4	
RAD51	LOC101927929	ACVRL1	CDK1	BIRC5	OXLD1	TLCD1	CRTAC1	LINC01410	BK1	CLDN6	KCNMB2-AS1	CLDN18	LIN28B	HJURP	
SNF	STON2	RAB39B	TNF	CDC6	PSD2	ARHGAP11B	PRSS2	ST3GAL3	MCF2L	AFF3	CCDC167	TBC1D10C	ENDOG	SOX11	

TFAP2A	RACGAP1	FANCA	CD24	RUNX1	LYPD6	TMPRSS4	ZNF710	CBS	KCNV1	REG4	NPTX2	NR5A2	RAD54B	HOXD13
BOLA2B	ASS1	FOXA3	GPRC5B	GPR137C	TMTC4	FBXL22	NETO2	ARL6IP4	LOC284661	LOC100505609	CLEC5A	BRICD5	SYN2	ADGRV1
UBE2C	PABPC1L	KIAA0101	ANGPT2	CXCL13	HEY2	FMNL3	CCNB3	TRMT1	SLC39A14	LINC01503	HNRNPU	ZNF396	CELSR3-AS1	AOC1
BUB1	PAX8	FOLR1	RNF157-AS1	FAM124A	HRASLS2	NAA38	ESPN	GOLGA6A	STRA13	DRD3	PALM3	CHGA	LOC101928526	WNT11
POC1A	PTTG1	VMP1	C1orf186	FOXP4-AS1	SMIM22	SLC7A5P1	INSL6	BANCR	CXCR4	HTR1F	FAM71E1	ZFP1	HIST2H4B	NLRP7
ERFE	CP	MSX1	SAC3D1	ZFPL1	HIST2H4	RASGEF1A	HMGA2	VWF	GTSE1	DAPL1	LINC01222	KLHL3	LINC00700	MEIOC
CCNB2	ARAP3	WHSC1	CYYR1	CDC45	LOC150051	KIAA1217	COL9A1	SOX9	WISP3	SLC8A1	SH3GL3	HN1	CDC25A	OIT3
CKS2	CCNB1	SLC35F6	KCNG1	MKI67	DEPDC1	PDE11A	ENDOU	TMEM169	S100A2	TNK2	IGF2BP3	MYCNOS	PIKFYVE	CFAP157
CCNE1	PILRB	TPCN2	NES	RIPPLY2	TRIP13	MFSD7	KLHL25	SOGA1	LOC105375839	C11orf96	FAM65A	GRIA2	ITGB2	EHF
AIF1L	ZBTB42	SYT11	LAMTOR5-AS1	MCAM	RECQL4	STK38	HIPK3	CCSAP	UNC13A	AUNIP	TMEM45B	CSMD2	TBX2	RXFP1
GLDC	GDF11	CDKN2A	FMNL3	LOC100289283	CEP55	SDCBP2-AS1	TNFRSF12A	LINC00454	EWSAT1	SNX32	MUC5AC	BCAT1	SCGB1C2	SCGB2A1
LOC102724312	PTPRG	MICALL2	ATXN7L1	CDCA8	SEPT8	TAPBP	FANCB	FILIP1	FZD10	INSM1	STAB1	ALDH1L2	EXOC5	FOXQ1
CXXC5	WNT7A	ADCY4	CYYR1	HIST1H2AM	BOP1	BCL11A	ITGB8	GOLGA6L2	LINC00173	SYNE4	ABTB2	PART1	CAMKMT	ATF5
GGCX	EMC3-AS1	CRABP2	LGALS9	UNC5A	CASZ1	EMC1	C2CD3	ANGPT2	ASTN2	CYP19A1	ROCK1	ZIC1	GAN	SLC12A1
PRR11	CENPF	GLDN	ELF3	LOC285812	RASSF10	KIF14	MIR142	RAB1A	PAX6	LOC101559451	NRG3	LOC100288570	TFAP2D	KRT23
KLK8	CDH6	FLT1	DENND4B	PYM1	APBA2	CHCHD10	LETM1	NEURL1B	LOC105373764	AJAP1	CAPN9	CDH24	ANKRD65	
PAX8	CD24	SPC24	VSIG10	LPCAT4	ADM5	ZNF578	CASQ2	SUSD4	UBE2O	C17orf96	GATA3	BCAT1	TIMM8A	
KIAA1217	PIF1	COL4A1	ST6GALNAC1	LINGO1	FOXN1	LOC101928047	SSTR1	TOP2A	SNN	HOXB8	C5orf46	APOA1	SDC1	
CENPU	CDC25C	EPB41L5	MROH2A	LOC101928271	ECSCR	TNRC6C-AS1	ILDRI	RAD54L	RHD	OLIG2	ARPC4	SNAPC4	COL23A1	
NR2F6	LHX6	RELT	SLC19A1	MAGEA5	MEX3A	ANKS4B	RIMS3	GPR39	FGF8	TNNT1	RAB17	ZFP36L2	INCENP	
CXXC5	EZH2	EXO1	FDX1L	TMEM102	HOXD-AS2	KIF11	TACC3	THADA	SLC38A10	MATR3	CXCL17	SLC06A1	PTGER1	
S100A13	MTHFD2	CATIP-AS1	LIMS4	CCM2L	CTHRC1	GAGE12D	LOC101927523	SIX3	MKRN2	CCNA2	HES6	ZNF93	ICOS	
HMGA1	ANGPT2	FANCI	GRHL2	MEOX1	GUCY1A3	VPS8	ME3	ZNF672	TFAP2B	LINC00276	LOC102724156	PART1	LINC00491	
BSPRY	GNGT1	GNAS	LYPD1	TMPO-AS1	RNF144B	NAA38	GPSM2	WDR72	COX8C	KLF12	EFCAB3	PDE4D	COL5A1	
FZD2	GUCY1A3	MPZL2	NRP2	MPZL2	FOXH1	WDR72	NCAPG	FAM111B	LCN2	CYP19A1	ANKRD30BP3	COL15A1	C8orf4	
ERCC6L	GJC1	DNPH1	TNNI3	MTRF1L	ERV3-2	KCTD1	MCM10	HIST1H1C	IQCF5-AS1	MCM5	SLC6A2	LOC285422	LINC00969	
SORT1	TOP2A	GDF11	PRRG2	VWA1	SPON1	RUSC1-AS1	CDH6	ESRP1	CCDC150	ST3GAL6	RNF144A-AS1	CDIPT-AS1	LIX1	
SNTB1	KLHL14	COL4A2	PLXND1	KCTD1	KIFC1	CP	LOC100507670	TTC39A	CCDA3	INHBB	SNHG4	SERINC2	MCM7	
NCAPH	VEGFA	CHTF18	SLC13A4	GRAMD2	BCL11A	GOLGA8A	LRIG2	GUCY1B3	LINC01271	APOE	MUC1	PAX5	AIM2	
MECOM	BCL11A	FGF18	LOC100507468	XDH	RNASEH2A	XK	CCR7	MCM3AP-AS1	HIST1H1A	LOC100652911	FOXR2	PRSS23	PDCL2	

Table S5. GO and KEGG analysis of common genes.

ONTOLOGY	ID	Description	Gene Ratio	P value	P adjust
BP	GO:0051782	negative regulation of cell division	3/34	0.0000	0.0056
BP	GO:0090068	positive regulation of cell cycle process	6/34	0.0000	0.0092
BP	GO:0008608	attachment of spindle microtubules to kinetochore	3/34	0.0000	0.0111
BP	GO:0045787	positive regulation of cell cycle	6/34	0.0001	0.0188
BP	GO:0048255	mRNA stabilization	3/34	0.0001	0.0188
BP	GO:0043489	RNA stabilization	3/34	0.0001	0.0207
BP	GO:1902373	negative regulation of mRNA catabolic process	3/34	0.0001	0.0207
BP	GO:0000082	G1/S transition of mitotic cell cycle	5/34	0.0001	0.0221
BP	GO:1902369	negative regulation of RNA catabolic process	3/34	0.0002	0.0221
BP	GO:0044843	cell cycle G1/S phase transition	5/34	0.0002	0.0221
CC	GO:1990023	mitotic spindle midzone	2/35	0.0002	0.0133
CC	GO:0010369	chromocenter	2/35	0.0003	0.0133
CC	GO:0098687	chromosomal region	5/35	0.0004	0.0133
CC	GO:0005581	collagen trimer	3/35	0.0005	0.0139
CC	GO:0072686	mitotic spindle	3/35	0.0009	0.0214
CC	GO:0051233	spindle midzone	2/35	0.0017	0.0312
CC	GO:0090575	RNA polymerase II transcription factor complex	3/35	0.0030	0.0464
CC	GO:0030496	midbody	3/35	0.0035	0.0464
CC	GO:0044420	extracellular matrix component	2/35	0.0037	0.0464
CC	GO:0000775	chromosome, centromeric region	3/35	0.0048	0.0505
MF	GO:0030020	extracellular matrix structural constituent conferring tensile strength	3/33	0.0001	0.0091
MF	GO:0016646	oxidoreductase activity, acting on the CH-NH group of donors, NAD or NADP as acceptor	2/33	0.0006	0.0373
MF	GO:0003688	DNA replication origin binding	2/33	0.0009	0.0373
MF	GO:0004674	protein serine/threonine kinase activity	5/33	0.0012	0.0373
MF	GO:0016645	oxidoreductase activity, acting on the CH-NH group of donors	2/33	0.0012	0.0373
MF	GO:0005201	extracellular matrix structural constituent	3/33	0.0034	0.0778
MF	GO:1990841	promoter-specific chromatin binding	2/33	0.0036	0.0778
KEGG	hsa00670	One carbon pool by folate	2/16	0.0007	0.0260
KEGG	hsa04974	Protein digestion and absorption	3/16	0.0010	0.0260
KEGG	hsa04110	Cell cycle	3/16	0.0017	0.0296
KEGG	hsa05167	Kaposi sarcoma-associated herpesvirus infection	3/16	0.0060	0.0725
KEGG	hsa05203	Viral carcinogenesis	3/16	0.0070	0.0725