

Supplementary Data

Human microRNA similarity in breast cancer

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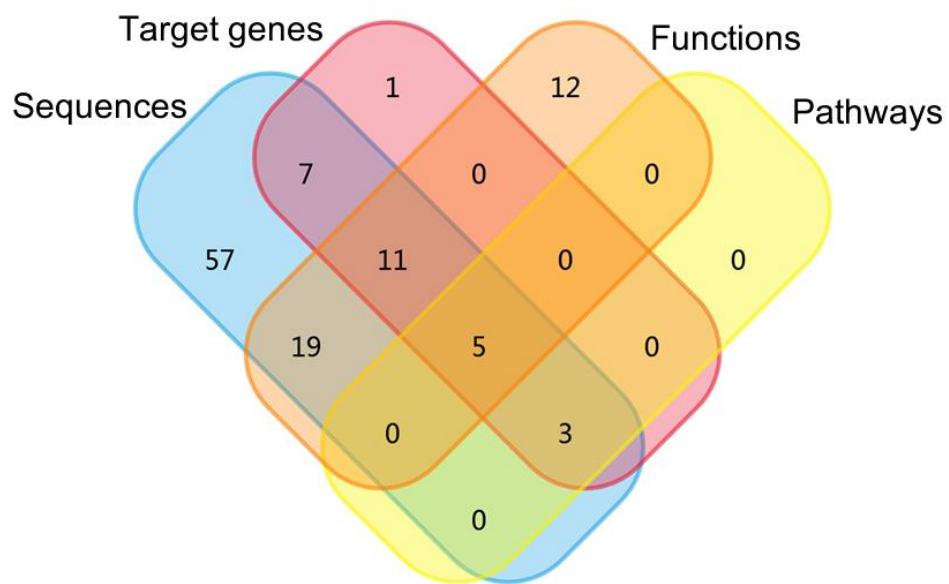
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Supplementary Figure S1. Venn diagram comparing the miRNAs related to sequences, target genes, pathways and functions in similarity networks.

Supplementary Table S1. Pathway analysis of hsa-miR-20b-5p, hsa-miR-106b-5p, hsa-miR-141-3p, hsa-miR-195-5p and hsa-miR-429 (miRPathDB, $p < 0.05$).

MiRNAs	Pathway	p-value	Targets
hsa-miR-20b-5p	Pathways in cancer	5.00E-04	<i>AKT3, CDKN1A, FZD6, HIF1A, MAPK9, PPARG, PTEN, STAT3, VEGFA</i>
hsa-miR-106b-5p	Cell cycle	4.38E-05	<i>CCND1, CCND2, CDKN1A, E2F1, E2F5, RB1, RBL1, RBL2, WEE1</i>
hsa-miR-141-3p	MiRNAs in cancer	2.82E-06	<i>CDC25A, CDC25C, CYP1B1, E2F3, MCL1, MDM4, PTEN, SHC1, TGFB2, ZEB1, ZEB2, ZFPM2</i>
hsa-miR-195-5p	Pathways in cancer	3.99E-07	<i>ABL1, AKT2, APC2, AR, ARAF, ARNT, ARNT2, AXIN2, BCL2, BCL2L1, BCR, BID, BIRC5, BMP2, CASP3, CASP9, CBL, CBLB, CBLC, CCDC6, CCND1, CCNE1, CCNE2, CDC42, CDH1, CDK4, CDK6, CDKN1A, CDKN2B, CHUK, CKS1B, COL4A1, COL4A3, COL4A4, CRK, CRKL, CTBP2, CTNNA1, CTNNA3, CXCL8, CYCS, DAPK3, DCC, DVL1, DVL2, DVL3, E2F1, E2F2, E2F3, EGFR, EGLN1, EGLN3, ELOB, ELOC, FGF1, FGF10, FGF11, FGF14, FGF18, FGF19, FGF2, FGF20, FGF23, FGF5, FGF8, FGF9, FGFR1, FGFR2, FGFR3, FLT3, FOS, FOXO1, FZD10, FZD3, FZD4, FZD6, FZD7, FZD8, FZD9, GLI2, GLI3, GSK3B, HDAC2, HHIP, HIF1A, HRAS, HSP90AA1, HSP90B1, IGF1, ITGA2, ITGB1, JAK1, JUP, KIT, KLK3, KRAS, LAMA4, LAMC1, LAMC3, LEF1, MAP2K1, MAP2K2, MAPK1, MAPK10, MAPK3, MAPK8, MAPK9, MAX, MECOM, MITF, MSH2, MSH3, MSH6, NFKB1, NKX3-1, NOS2, PAX8, PDGFA, PDGFRA, PDGFRB, PIAS2, PIK3CA, PIK3CB, PIK3CG, PIK3R1, PIK3R2, PIK3R3, PIK3R5, PLCG1, PLD1, PML, PPARD, PPARG, PRKCA, PRKCG, PTCH1, PTCH2, PTEN, PTGS2, RAC2, RAF1, RALB, RALBP1, RALGDS, RARB, RASSF1, RBX1, RET, RHOA, RUNX1, RUNX1T1, RXRA, SHH, SMAD2, SMAD3, SMO, SOS2, STAT1, STAT3, STAT5A, STAT5B, STK36, SUFU, TCF7, TCF7L2, TFG, TGFA, TGFB2, TGFBR1, TGFBR2, TP53, TPM3, TRAF1, TRAF2, TRAF3, TRAF4, TRAF5, TRAF6, VEGFA, VEGFB, VEGFD, WNT2B, WNT3, WNT3A, WNT4, WNT5B, WNT7A, WNT7B, WNT8A, WNT8B, WNT9A, WNT9B, XIAP, ZBTB16</i>
hsa-miR-429	MiRNAs in cancer	8.22E-15	<i>BCL2, BCL2L11, CDKN1B, CRKL, DDIT4, DNMT1, EP300, EZH2, FSCN1, IRS1, KRAS, MAPK7, MYC, PLCG1, PTEN, SHC1, VEGFA, ZEB1, ZEB2, ZFPM2</i>