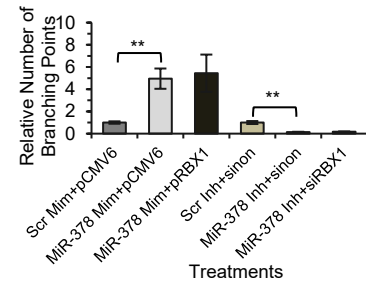
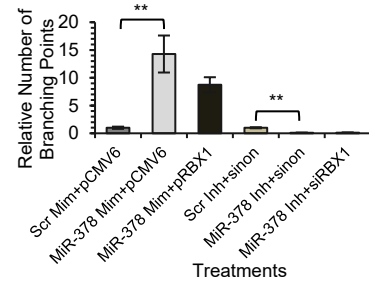
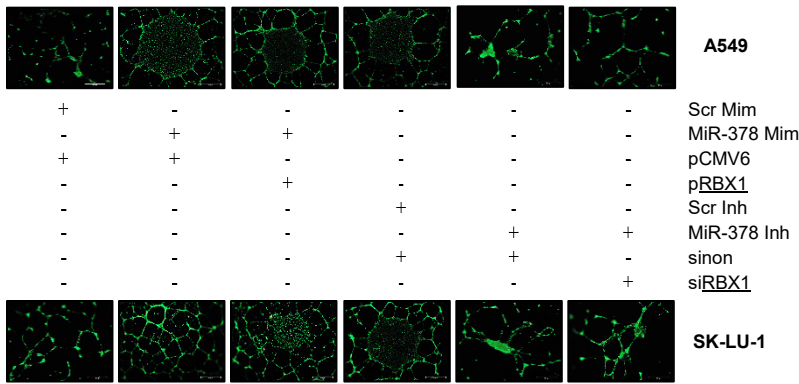


Figure S1

A



B

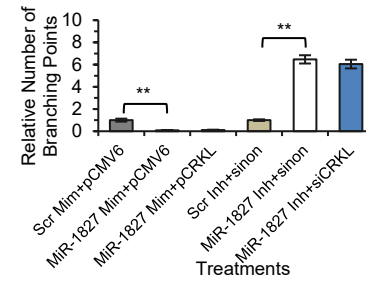
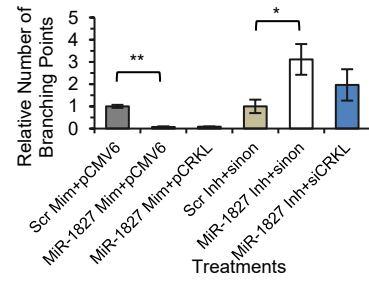
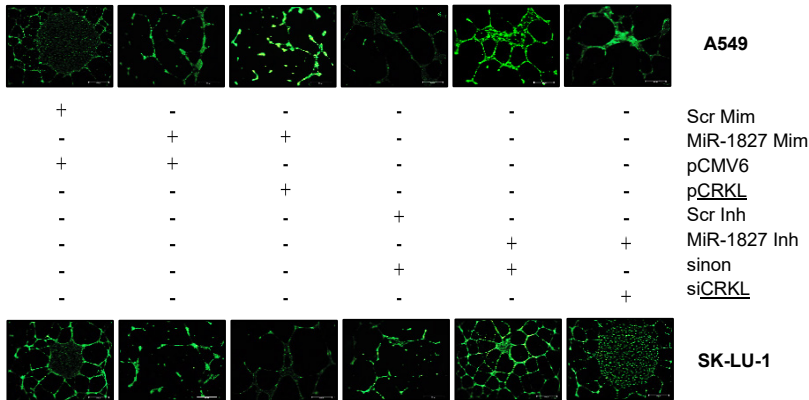


Figure S1: RBX1 and CRKL are not main players in miR-378-induced and miR-1827-repressed angiogenesis. (A) Angiogenic effects of RBX1 overexpression and silencing in A549 and SK-LU-1 cells. (B) Angiogenic effects of CRKL overexpression and silencing in A549 and SK-LU-1 cells.

Table S1: MiR-378 gene targets predicted by DIANA-microT-CDS and TargetScan and annotated by DAVID.

Gene Symbol	Gene Name	DIANA miTG Score	TargetScan Total Context Score	DAVID Functional Annotation
ERBB4	v-Erb-B2 avian erythroblastic leukemia viral oncogene homolog 4	0.715	-0.100	ErbB signaling pathway
NKX3-1	NK3 homeobox 1	0.895	-0.810	Pathways in cancer
PAX8	Paired box 8	0.851	-0.160	Pathways in cancer
PLA2G12A	Phospholipase A2, group XIIA	0.833	-0.470	Ras signaling pathway
RAD51	RAD51 recombinase	0.741	-0.200	Pathways in cancer
RAPGEF5	Rap Guanine nucleotide exchange factor (GEF) 5	0.715	-0.150	Rap1 signaling pathway Ras signaling pathway
RBX1	Ring-box 1, E3 ubiquitin protein ligase	0.861	-0.470	HIF-1 signaling pathway Pathways in cancer TGF-beta signaling pathway
SKP2	S-phase kinase-associated protein 2, E3 ubiquitin protein ligase	0.860	-0.220	Pathways in cancer

Putative gene targets were identified using default parameters and filtered by KEGG pathways related to cell invasion, migration and

Table S2: MiR-1827 gene targets predicted by DIANA-microT-CDS and TargetScan and annotated by DAVID.

Gene Symbol	Gene Name	DIANA miTG Score	TargetScan Total Context Score	DAVID Functional Annotation
ADCY2	Adenylate cyclase 2 (brain)	0.796	-0.160	Pathways in cancer
AR	Androgen receptor	0.940	-0.290	Pathways in cancer
ATM	Ataxia telangiectasia mutated	0.770	-0.150	p53 signaling pathway
BBC3	BCL2 binding component 3	0.922	-0.160	Hippo signaling pathway p53 signaling pathway
BCL2L1	BCL2-like 1	0.819	-0.240	Pathways in cancer
BCR	Breakpoint cluster region	0.779	-0.090	Pathways in cancer
BDKRB2	Bradykinin receptor B2	0.732	-0.520	Pathways in cancer
CAMK2A	Calcium/ calmodulin-dependent protein kinase II alpha	0.807	-0.240	ErbB signaling pathway Wnt signaling pathway
CCNG1	Cyclin G1	0.925	-0.400	p53 signaling pathway
CDKN1B	Cyclin-dependent kinase inhibitor 1B (p27, Kip1)	0.796	-0.260	ErbB signaling pathway Pathways in cancer
CRB2	Crumbs homolog 2 (Drosophila)	0.723	-0.100	Hippo signaling pathway
CRKL	v-CRK avian sarcoma virus CT10 oncogene homolog-like	0.899	-0.320	ErbB signaling pathway Pathways in cancer
CYCS	Cytochrome c, somatic	0.826	-0.700	p53 signaling pathway Pathways in cancer
E2F2	E2F transcription factor 2	0.742	-0.690	Pathways in cancer
ERBB4	v-Erb-B2 avian erythroblastic leukemia viral oncogene homolog 4	0.890	-0.100	ErbB signaling pathway

FAS	Fas cell surface death receptor	0.754	-0.300	p53 signaling pathway Pathways in cancer
FGF18	Fibroblast growth factor 18	1.000	-0.640	Pathways in cancer
FGF20	Fibroblast growth factor 20	0.734	-0.250	Pathways in cancer
FZD3	Frizzled family receptor 3	0.845	-0.180	Hippo signaling pathway Pathways in cancer Wnt signaling pathway
FZD5	Frizzled family receptor 5	0.759	-0.200	Hippo signaling pathway Pathways in cancer Wnt signaling pathway
GRB2	Growth factor receptor-bound protein 2	0.716	-0.430	ErbB signaling pathway Pathways in cancer
GSK3 β	Glycogen synthase kinase 3 beta	0.982	-0.330	ErbB signaling pathway Hippo signaling pathway Pathways in cancer Wnt signaling pathway
IGF1	Insulin-like growth factor 1 (somatomedin C)	0.845	-0.780	p53 signaling pathway Pathways in cancer
IKBKG	Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma	0.714	-0.640	Pathways in cancer
LAMC2	Laminin, gamma 2	0.816	-0.430	Pathways in cancer
LIMD1	LIM domains containing 1	0.800	-0.300	Hippo signaling pathway
LLGL2	Lethal giant larvae homolog 2 (Drosophila)	0.802	-0.290	Hippo signaling pathway
LRP6	Low density lipoprotein receptor-related protein 6	0.969	-0.170	Wnt signaling pathway

MDM2	MDM2 oncogene, E3 ubiquitin protein ligase	0.992	-0.400	p53 signaling pathway Pathways in cancer
MDM4	Mdm4 p53 binding protein homolog (mouse)	0.882	-0.780	p53 signaling pathway
MITF	Microphthalmia-associated transcription factor	0.801	-0.290	Pathways in cancer
MYC	v-Myc avian myelocytomatosis viral oncogene homolog	1.000	-0.580	ErbB signaling pathway Hippo signaling pathway Pathways in cancer Wnt signaling pathway
NCOA4	Nuclear receptor coactivator 4	0.715	-0.260	Pathways in cancer
NF2	Neurofibromin 2 (merlin)	0.871	-0.350	Hippo signaling pathway
NFATC3	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	0.863	-0.420	Wnt signaling pathway
NFATC4	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4	0.842	-0.820	Wnt signaling pathway
NKD1	Naked cuticle homolog 1 (Drosophila)	0.720	-0.170	Wnt signaling pathway
PAK1	p21 protein (Cdc42/ Rac)-activated kinase 1	0.739	-0.110	ErbB signaling pathway
PLCG1	Phospholipase C, gamma 1	0.803	-0.240	ErbB signaling pathway Pathways in cancer
PLEKHG5	Pleckstrin homology domain containing, family G (with RhoGEF domain) member 5	0.923	-0.520	Pathways in cancer
PPP2R2A	Protein phosphatase 2, regulatory subunit B, alpha	0.802	-0.330	Hippo signaling pathway
PTGS2	Prostaglandin-endoperoxide synthase 2 (prostaglandin G/ H synthase and cyclooxygenase)	0.831	-0.160	Pathways in cancer

RALBP1	RALBP1 associated EPS domain containing 2	0.700	-0.230	Pathways in cancer
RCHY1	Ring finger and CHY zinc finger domain containing 1, E3 ubiquitin protein ligase	0.848	-0.160	p53 signaling pathway
RXRB	Retinoid X receptor, beta	0.700	-0.100	Pathways in cancer
STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)	0.703	-0.140	Pathways in cancer
STAT5B	Signal transducer and activator of transcription 5B	0.966	-0.450	ErbB signaling pathway Pathways in cancer
STK36	Serine/threonine kinase 36	0.884	-0.200	Pathways in cancer
STK4	Serine/threonine kinase 4	0.759	-0.140	Pathways in cancer
SUFU	Suppressor of fused homolog (Drosophila)	0.710	-0.340	Pathways in cancer
THBS1	Thrombospondin 1	0.981	-0.290	p53 signaling pathway
TP73	Tumor protein p73	0.721	-0.300	Hippo signaling pathway p53 signaling pathway
TPM3	Tropomyosin 3	0.885	-0.560	Pathways in cancer
VANGL2	VANGL planar cell polarity protein 2	0.754	-0.180	Wnt signaling pathway
VHL	von Hippel-Lindau tumor suppressor, E3 ubiquitin protein ligase	0.938	-0.520	Pathways in cancer
WNT2B	Wingless-type MMTV integration site family, member 2B	0.721	-0.220	Hippo signaling pathway Pathways in cancer Wnt signaling pathway
WNT3A	Wingless-type MMTV integration site family, member 3A	0.849	-0.410	Hippo signaling pathway Pathways in cancer Wnt signaling pathway

WNT5B	Wingless-type MMTV integration site family, member 5B	0.852	-0.450	Hippo signaling pathway Pathways in cancer Wnt signaling pathway
WNT9B	Wingless-type MMTV integration site family, member 9B	0.720	-0.510	Hippo signaling pathway Pathways in cancer Wnt signaling pathway

Putative gene targets were identified using default parameters and filtered by KEGG pathways related to cell invasion, migration and angiogenesis.