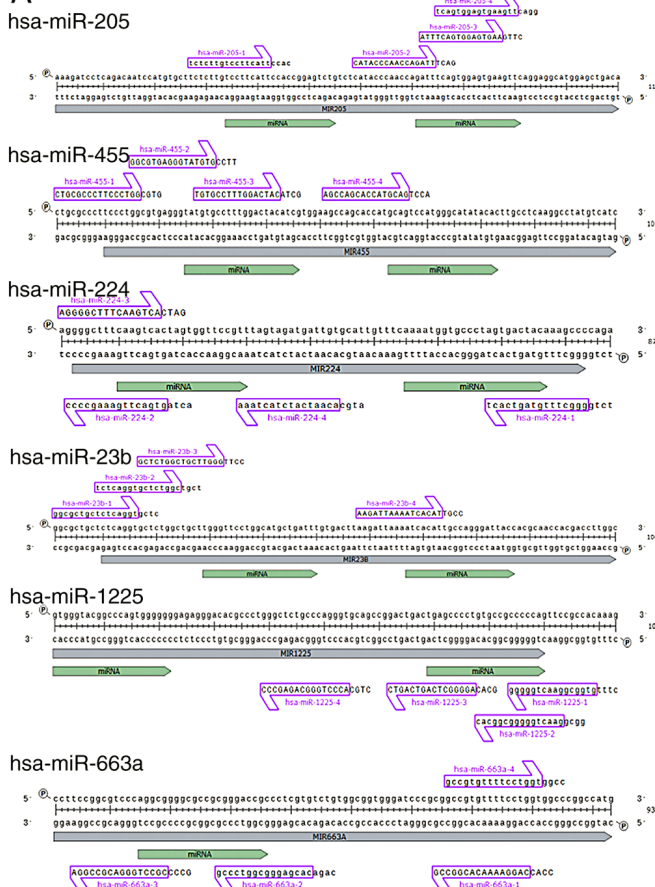
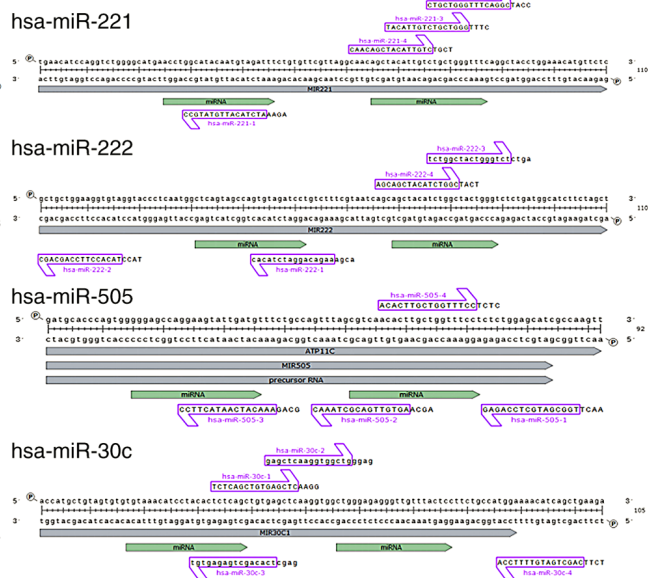


Figure S1. The sgRNA designed and the CRISPR/Cas9 lentiCRISPR-v2 vector. (A) the sgRNA position in genomic DNA of micro RNAs. (B) The CRISPR/Cas9 lentiCRISPR-v2 vector.

hsa-miR-205



hsa-miR-221



B

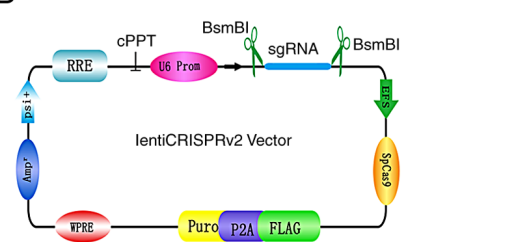


Figure S2. Genomic location of the PCR products in T7E1 assays.

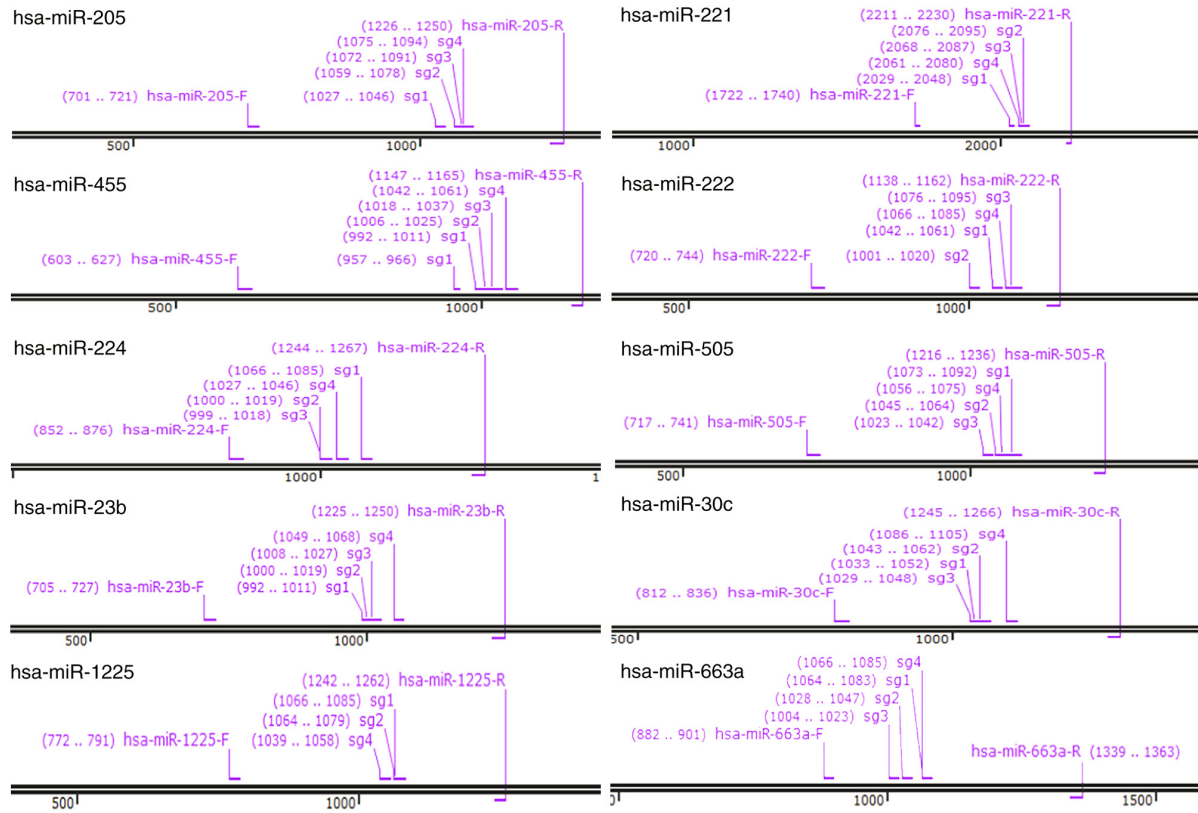


Table SI. Single guide RNA target sequences of miRNAs and control.

Name	Genomic target
hsa-miR-205-1	TCTCTTGTCTTCATTCCAC
hsa-miR-205-2	CATACCCAACCAGATTTTCAG
hsa-miR-205-3	ATTTTCAGTGGAGTGAAGTTC
hsa-miR-205-4	TCAGTGGAGTGAAGTTCAGG
hsa-miR-221-1	AGAAATCTACATTGTATGCC
hsa-miR-221-2	CTGCTGGGTTTCAGGCTACC
hsa-miR-221-3	TACATTGTCTGCTGGGTTTC
hsa-miR-221-4	CAACAGCTACATTGTCTGCT
hsa-miR-455-1	CTGCGCCCTTCCCTGGCGTG
hsa-miR-455-2	GGCGTGAGGGTATGTGCCTT
hsa-miR-455-3	TGTGCCTTTGGACTACATCG
hsa-miR-455-4	AGCCAGCACCATGCAGTCCA
hsa-miR-222-1	ACGAAAGACAGGATCTACAC
hsa-miR-222-2	TACCTACACCTTCCAGCAGC
hsa-miR-222-3	TCTGGCTACTGGGTCTCTGA
hsa-miR-222-4	AGCAGCTACATCTGGCTACT
hsa-miR-224-1	TCTGGGGCTTTGTAGTCACT
hsa-miR-224-2	ACTAGTGACTTGAAAGCCCC
hsa-miR-224-3	AGGGGCTTTCAAGTCACTAG
hsa-miR-224-4	ATGCACAATCATCTACTAAA
hsa-miR-505-1	AACTTGGCGATGCTCCAGAG
hsa-miR-505-2	AGCAAGTGTTGACGCTAAAC
hsa-miR-505-3	GCAGAAACATCAATACTTCC
hsa-miR-505-4	ACACTTGCTGGTTTCCTCTC
hsa-miR-23b-1	GGCGCTGCTCTCAGGTGCTC
hsa-miR-23b-2	TCTCAGGTGCTCTGGCTGCT
hsa-miR-23b-3	GCTCTGGCTGCTTGGGTTCC
hsa-miR-23b-4	AAGATTAAAATCACATTGCC
hsa-miR-30c-1	TCTCAGCTGTGAGCTCAAGG
hsa-miR-30c-2	GAGCTCAAGGTGGCTGGGAG
hsa-miR-30c-3	GAGCTCACAGCTGAGAGTGT
hsa-miR-30c-4	TCTTCAGCTGATGTTTTCCA
hsa-miR-1225-1	CTTTGTGGCGGAACTGGGGG
hsa-miR-1225-2	GGCGGAACTGGGGGCGGCAC
hsa-miR-1225-3	GCACAGGGGCTCAGTCAGTC
hsa-miR-1225-4	CTGCACCCTGGGCAGAGCCC
hsa-miR-663a-1	CCACCAGGAAAACACGGCCG
hsa-miR-663a-2	CAGACACGAGGGCGGTCCCG
hsa-miR-663a-3	GCCCCGCCTGGGACGCCGGA
hsa-miR-663a-4	GCCGTGTTTTCTGGTGGCC
miR-NC-1	ACGGAGGCTAAGCGTCGCAA
miR-NC-2	CGCTTCCGCGGCCCGTTCAA
miR-NC-3	ATCGTTTCCGCTTAACGGCG
miR-NC-4	GTAGGCGCGCCGCTCTCTAC

miR, microRNA; hsa, human.

Table SII. Primer sequence containing single guide RNA of miRNAs for cloning into PXC9 CRISPR/Cas9-Puro vector.

Gene ID	Primer	Forward Sequence (5'→3')	Primer	Reverse Sequence (5'→3')
hsa-mir-205	m205-F1	caccgTCTCTTGTCTTCATTCCAC	m205-R1	aaacGTGGAATGAAGGACAAGAGAc
	m205-F2	caccgCATACCCAACCAGATTTCAG	m205-R2	aaacCTGAAATCTGGTTGGGTATGc
	m205-F3	caccgATTTCAGTGGAGTGAAGTTC	m205-R3	aaacGAACCTTCACTCCACTGAAATc
	m205-F4	caccgTCAGTGGAGTGAAGTTCAGG	m205-R4	aaacCCTGAACTTCACTCCACTGAc
hsa-mir-221	m221-F1	caccgAGAAATCTACATTGTATGCC	m221-R1	aaacGGCATAACAATGTAGATTTCTc
	m221-F2	caccgCTGCTGGGTTTCAGGCTACC	m221-R2	aaacGGTAGCCTGAAACCCAGCAGc
	m221-F3	caccgTACATTGTCTGCTGGGTTTC	m221-R3	aaacGAAACCCAGCAGACAATGTAc
	m221-F4	caccgCAACAGCTACATTGTCTGCT	m221-R4	aaacAGCAGACAATGTAGCTGTTGc
hsa-mir-455	m455-F1	caccgCTGCGCCCTTCCCTGGCGTG	m455-R1	aaacCACGCCAGGGAAGGGCGCAGc
	m455-F1	caccgGGCGTGAGGGTATGTGCCTT	m455-R1	aaacAAGGCACATACCCTCACGCCc
	m455-F1	caccgTGTGCCTTTGGACTACATCG	m455-R1	aaacCGATGTAGTCCAAAGGCACAc
	m455-F1	caccgAGCCAGCACCATGCAGTCCA	m455-R1	aaacTGGACTGCATGGTGCTGGCTc
hsa-mir-222	m222-F1	caccgACGAAAGACAGGATCTACAC	m222-R1	aaacGTGTAGATCCTGTCTTTTCGTc
	m222-F2	caccgTACCTACACCTTCCAGCAGC	m222-R2	aaacGCTGCTGGAAGGTGTAGGTAc
	m222-F3	caccgTCTGGCTACTGGGTCTCTGA	m222-R3	aaacTCAGAGACCCAGTAGCCAGAc
	m222-F4	caccgAGCAGCTACATCTGGCTACT	m222-R4	aaacAGTAGCCAGATGTAGCTGCTc
hsa-mir-224	m224-F1	caccgTCTGGGGCTTTGTAGTCACT	m224-R1	aaacAGTGACTACAAAGCCCCAGAc
	m224-F2	caccgACTAGTGACTTGAAAGCCCC	m224-R2	aaacGGGGCTTTCAAGTCACTAGTc
	m224-F3	caccgAGGGGCTTTCAAGTCACTAG	m224-R3	aaacCTAGTGACTTGAAAGCCCCTc
	m224-F4	caccgATGCACAATCATCTACTAAA	m224-R4	aaacTTTAGTAGATGATTGTGCATc
hsa-mir-505	m505-F1	caccgAACTTGCGCATGCTCCAGAG	m505-R1	aaacCTCTGGAGCATCGCCAAGTTc
	m505-F2	caccgAGCAAGTGTTGACGCTAAAC	m505-R2	aaacGTTTAGCGTCAACACTTGCTc
	m505-F3	caccgGCAGAAACATCAATACTTCC	m505-R3	aaacGGAAGTATTGATGTTTCTGCc
	m505-F4	caccgACACTTGCTGGTTTCCTCTC	m505-R4	aaacGAGAGGAAACCAGCAAGTGTc
hsa-mir-23b	m23b-F1	caccgGGCGCTGCTCTCAGGTGCTC	m23b-R1	aaacGAGCACCTGAGAGCAGCGCCc
	m23b-F2	caccgTCTCAGGTGCTCTGGCTGCT	m23b-R2	aaacAGCAGCCAGAGCACCTGAGAc
	m23b-F3	caccgGCTCTGGCTGCTTGGGTTC	m23b-R3	aaacGGAACCCAAGCAGCCAGAGCc
	m23b-F4	caccgAAGATTAAAATCACATTGCC	m23b-R4	aaacGGCAATGTGATTTTAATCTTc
hsa-mir-30c-1	m30c1-F1	caccgTCTCAGCTGTGAGCTCAAGG	m30c1-R1	aaacCCTTGAGCTCACAGCTGAGAc
	m30c1-F2	caccgGAGCTCAAGGTGGCTGGGAG	m30c1-R2	aaacCTCCCAGCCACCTTGAGCTCc
	m30c1-F3	caccgGAGCTCACAGCTGAGAGTGT	m30c1-R3	aaacACACTCTCAGCTGTGAGCTCc
	m30c1-F4	caccgTCTTCAGCTGATGTTTTCCA	m30c1-R4	aaacTGGAACACATCAGCTGAAGAc
hsa-mir-1225	m1225-F1	caccgCTTTGTGGCGGAAGTGGGGG	m1225-R1	aaacCCCCAGTTCCGCCACAAAGc
	m1225-F2	caccgGGCGGAAGTGGGGCGGCAC	m1225-R2	aaacGTGCCGCCCCAGTTCCGCCc
	m1225-F3	caccgGCACAGGGGCTCAGTCAGTC	m1225-R3	aaacGACTGACTGAGCCCCTGTGCc
	m1225-F4	caccgCTGCACCCTGGGCAGAGCCC	m1225-R4	aaacGGGCTCTGCCAGGGTGCAGc
hsa-mir-663a	m663a-F1	caccgCCACCAGGAAAACACGGCCG	m663a-R1	aaacCGGCCGTGTTTTCTTCTGGTGGc
	m663a-F2	caccgCAGACACGAGGGCGGTCCCG	m663a-R2	aaacCGGGACCGCCCTCGTGTCTGc
	m663a-F3	caccgGCCCCGCCTGGGACGCCGGA	m663a-R3	aaacTCCGGCGTCCCAGGCGGGGCc
	m663a-F4	caccgGCCGTGTTTTCTTGGTGGCC	m663a-R4	aaacGGCCACCAGGAAAACACGGCc
C-0001	C-0001-F	caccgACGGAGGCTAAGCGTCGCAA	C-0001-R	aaacTTGCGACGCTTAGCCTCCGTc
C-0002	C-0002-F	caccgCGCTTCCGCGGCCCGTTCAA	C-0002-R	aaacTTGAACGGGCGCGGAAGCGc
C-0003	C-0003-F	caccgATCGTTTCCGCTTAACGGCG	C-0003-R	aaacCGCCGTTAAGCGGAAACGATc
C-0004	C-0004-F	caccgGTAGGCGCGCCGCTCTCTAC	C-0004-R	aaacGTAGAGAGCGGCGCGCCTACc

miR, microRNA; CRISPR, clustered regularly interspaced short palindromic repeats; Cas9, CRISPR-associated 9; hsa, human.

Table SIII. PCR primers for the T7E1 assay.

Primer	Sequence (5'→3')
hsa-miR-205-F	CAGAGGAGGTTCCACATGGAC
hsa-miR-205-R	ATTGATCACATTTCTCTCTGGCTGT
hsa-miR-221-F	CCTGCCCACGTACCTACCA
hsa-miR-221-R	TCAGCTTTCTTGCGGTCCTT
hsa-miR-455-F	AGAGAATTCACAGCTCCACTACTGA
hsa-miR-455-R	CCACTGCCATCCCACATCC
hsa-miR-222-F	TTGTCACAAGGAATCATGTATGCTG
hsa-miR-222-R	GTTTTTCATTATTAAAGACTGCCCAA
hsa-miR-224-F	CTCTGGGGAAGCGGTTTTACTACCT
hsa-miR-224-R	GCCCAACTGGAAGAGTTTGAGACC
hsa-miR-505-F	CAAACAGGCCTTACTAAGAATAGCA
hsa-miR-505-R	GCAGTATTCCCACCATTGGA
hsa-miR-23b-F	TTGTCCCCAAGGGTTAGAGGCAG
hsa-miR-23b-R	TTGTTAGAGAGGTCATCGCTGGGCAT
hsa-miR-30c-F	CTTTGCCCTGAATAAGGACATGAGT
hsa-miR-30c-R	TCACTGAGGGCATGTCTATCCA
hsa-miR-1225-F	TACCCTGTGTCCTGCCGAGT
hsa-miR-1225-R	GCTCAGGCTCACACCTTGTCC
hsa-miR-663a-F	AGGATGGACGAGAATCACGA
hsa-miR-663a-R	TGTTTCTGCACTAAAGCATAAGCTC

T7E1, T7 endonuclease I; hsa, human; miR, microRNA; F, forward; R, reverse.