

Table SI. The sequence of PCR primers and Oligonucleotide sets used for short hairpin RNAs.

Primer name	Sequence (5'→3')
miR-223	F: CGCGCGTGTATTTGACAAGC R: GTGCAGGGTCCGAGGT
U6	F: CGCTTCACGAATTTGCGTGTCAT R: GCTTCGGCAGCACATATACTAAAAT
miR-451	F: CGCGAAACCGTTACCATTAC R: AGTGCAGGGTCCGAGGTATT
miR-150	F: CGCTGGTACAGGCCTGGG R: AGTGCAGGGTCCGAGGTATT
miR-126	F: GCGCGCATTATTACTTTTGG R: AGTGCAGGGTCCGAGGTATT
miR-486-3p	F: CGCGGGGCAGCTCAGTA R: AGTGCAGGGTCCGAGGTATT
miR-142-5p	F: GCGCGCATAAAGTAGAAAGC R: AGTGCAGGGTCCGAGGTATT
Mimics (miR-486-3p)	CGGGGCAGCUCAGUACAGGAUCU (Sense) AUCCUGUACUGAGCUGCCCCGUU (Antisense)
Inhibitors	AUCCUGUACUGAGCUGCCCCG (miR-486-3p)
NC mimics	UUGUACUACACAAAAGUACUGCU (Sense) CAGUACUUUUGUGUAGUACAAUU (Antisense)
NC inhibitors	CAGUACUUUUGUGUAGUACAA
GAPDH	F: CAAATATGATGACATCAAGAAGGTGG R: GGAGGAGTGGGTGTCGCTGTTG
MARCH1	F: GTCACATTCCACGTAATCG R: GTACATGAAGACAAGACCTCC
PDE10A	F: TTTTGTGCTTTAGCCTTACA R: CGCCGATAGTTCTTCTTCA
KCNK6	F: TGA CTGATGCGGGCAAGGC R: AA ACTGGCAGGGCACGGAGG
F2R	F: ACGCCTCTATCTTGCTCAT R: CACATAACAGACCGTGGA AAA
THRB	F: AGTGCCCAGACCTTCCAAA

	R: CGTGATACAGCGGTAGTGA
UNC5C	F: TGTATCGGAAGAATCATCGT
	R: TGACTCCTGAATTGGGAAC
SFRP1	F: AGCGAGTACGACTACGTGAGC
	R: AGAGCGAGCAGAGGAAGACC
ROBO2	F: AATAATAATCGGGAGACGC
	R: CTTGCGCAATACAACCATA
CircKEAP1 (convergent)	F: CCGCACCTTCAGCTACACCC
	R: TGGATACCCTCAATGGACACC
CircKEAP1 (divergent)	F: GATTGGCTGTGTGGAGTTGC
	R: TCAGTGGAGGCGTACATCAC
hsa_circ_00 20378 (DOCK1)	F: TGCTTCCCATGATGACCGAT
	R: CTAGGCCGCCATTTTCCATT
hsa_circ_00 10220 (ARHGEF1 0L)	F: AAAACCTCACAACTGCCTGG
	R: AGGAAGCCATCAGACAAGGT
hsa_circ_00 78767(FA M120B)	F: TGCAGCAACACCCTAGAAGA
	R: TCTAGAGATGCGCCAACACC
shRNA-NC	CCGGGCGAACGATCGAGTAAACGGACTCGAGTCCGTTTACTCGATCGTTCGCTTTTT (sense)
	AATTCAAAAAGCGAACGATCGAGTAAACGGACTCGAGTCCGTTTACTCGATCGTTCGC (antisense)
sh- MARCH1	CCGGACCAGCAGCCACGTTTGTGTCTCGAGACAACAAACGTGGCTGCTGGTTTTTTG (sense)
	AATTCAAAAACCAGCAGCCACGTTTGTGTCTCGAGACAACAAACGTGGCTGCTGGT (antisense)
CircKEAP1 (Wild-type)	GTCCCTGAGTGCCAGAGGTGGTGGTGTGCTTATCTTCTGGAACCCCATGCAGCCAGATCCCAGGCCTAGCGGGGCTGGGGCCTGCTGCCG ATTCTGCCCCCTGCAGTCACAGTGCCCTGAGGGGGCAGGGGACGCGGTGATGTACGCCTCCACTGAGTGCAAGGCGGAGGTGACGCCCTCC CAGCATGGCAACCGCACCTTCAGCTACACCCTGGAGGATCATAACAGCAGGCCTTTGGCATCATGAACGAGCTGCGGCTCAGCCAGCAGC TGTGTGACGTCACTGCAGGTCAAGTACCAGGATGCACCGGCCGCCAGTTCATGGCCCACAAGGTGGTGTGCTGGCCTCATCCAGCCCTGT CTTCAAGGCCATGTTACCAACGGGCTGCGGGAGCAGGGCATGGAGGTGGTGTCCATTGAGGGTATCCACCCCAAGGTCATGGAGCGCCTC ATTGAATTCGCCTACACGGCCTCCATCTCCATGGGCGAGAAGTGTGTCTCCACGTATGAACGGTGCTGTATGTACAGATCGACAGCGT TGTCCGTGCCTGCAGTGACTTCCTGGTGCAGCAGCTGGACCCAGCAATGCCATCGGCATCGCCAACCTTCGCTGAGCAGATTGGCTGTGT GGAGTTGCACCAGCGTGCCCGGGAGTACATCTACATGCATTTTGGGGAG

CircKEAP1 (Mut-type)	GTCCCTGAGTGCCAGAGGTGGTGGTGTGCTTATCTTCTGGAACCCCATGCAGCCAGATCCCAGGCCTAGCGGGGCTGGGGCCTGCTGCCG ATTCTGCCCCTGCAGTCACAGTGCCCTGAGGGGGCAGGGGACGCGGTGATGTACGCCTCCACTGAGTGCAAGGCGGAGGTGACGCCCTCC CAGCATGGCAACCGCACCTTCAGCTACACCCTGGAGGATCATAACCAAGCAGGCCTTTGGCATCATGAACGAGCTGCGGCTCAGCCAGCAGC TGTGTGACGTCACACTGCAGGTCAAGTACCAGGATGCACCGGCCGCCAGTTCATGGCCCACAAGGTGGTGGCTGGCCTCATCCAGCCCTGT CTTCAAGGCCATGTTACCAACGGGCTGCGGGAGCAGGGCATGGAGGTGGTGTCCATTGAGGGTATCCACCCCAAGGTCATGGAGCGCCTC ATTGAATTCGCCTACACGGCCTCCATCTCCATGGGCGAGAAGTGTGTCCTCCACGTCATGAACGGTGCTGTCATGTACCAGATCGACAGCGT TGTCCGTGCCTGCAGTGACT AGGACATGACTCGACGGGGCG CAATGCCATCGGCATCGCCAACCTTCGCTGAGCAGATTGGCTGTGTGGAGTT GCACCAGCGTGCCCGGGAGTACATCTACATGCATTTTGGGGAG
-------------------------	--

Notes 1. The italicized bold bases are the mutant sequence. 2. The reverse primer sequences used for miRNAs correspond to universal primers.
miR, microRNA; circ, circular; MARCH1, membrane-associated RINGCH finger protein 1; F, forward; R, reverse.