Supplementary Table 1: The target sequences of THAP7-AS1 Smart Silence

The target sequences of THAP7-AS1 Smart Silencer
5’- AGAAATGGGAGCTCATTAA-3’
5’-TGCCCACATCTTCATAATC-3’,
5’- TCAGAGCTGTGGACCAGTT-3’
5’- TAAGGCGCACTTGGCCGAAC-3’,
5’- TAATGCCCACCTGTCAGAGA-3’,
5’- TATATTGGCCTCAGAAATGG-3’

Supplementary Table 2. Sequences of primers.

Name	Sense primer (5′- to 3′)	Antisense primer (5′- to 3′)
Primers for cloning		
-2000/0	CGGCTAGCATGCTCCTTCAGAGTCTGGCGGGCA	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
-1002/0	CGGCTAGCCAGCTACACCAATCGCTTCCCCGCA	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
-509/0	CGGCTAGCCTGTGGAGCCACAAACCCGTGAGCA	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
-257/0	CGGCTAGCCTTCCCGACTGCATTCAGTCCCGCC	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
-210/0	CGGCTAGCCACCCACAGGTTCAAGCCTCCTCAG	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
-155/0	CGGCTAGCGTTGCGACCCGAGGCGAGCAACAAC	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
-101/0	CGGCTAGCACGCGCGCTGACCTGTGGAAGGAGA	CCCAAGCTTTCTTTCCCAGATGCCGCGTCACTGC
Primers for ChIP		
S1	CAAGCCTCGCCTCGGGTTGT	GCGGGGTCGCAGGGAGGTCT
S2	CCACGAGACCTCCCTGCGAC	CCCACTCTGTTACCTGCCAGATG
S3	AAGCAGTTTCCTCAGCGTCAT	TACTGAGGAGGCTTGAACCTG

Supplementary Table 3. Sequences of miR-22 ChIP primers.

Name	Sense primer	Antisense primer
Primers for ChIP		
miR-22-S1	5' GGCTCCGGGCAGTAGACCATG 3'	5' AGCAGGTGAAAGTCGCGGGAG 3'
miR-22-S2	5' CATCACCACCCACCGCCACAC 3'	5' CATGGGGTCTCCTGGGGGTTG 3'
miR-22-S3	5' CATGGGGTCTCCTGGGGGTTG 3'	5' CTCTTCTGACTCTGTCCCAGCC 3'
miR-22-S4	5' AACAGACCTGTCCTGCTCTTA 3'	5' TAATTCTTTGAAGTAGCTGGAAT 3'
miR-22-S5	5' TCCAGCTACTTCAAAGAATTAA 3'	5' AGTGTTATTATTTAAACCTTTGG 3'
miR-22-S6	5' GAAATACAAAATGTGGAAAATTT 3'	5' AATAGTGCATGTTATGTGATTTC 3'
miR-22-S7	5' TAACATGCACTATTTTTACAACCTT 3'	5' GAATTTATTCCTTTTCTGCTGTAAC 3'
miR-22-S8	5' CTATTGCAAACTTTCGTTACAGCAG 3'	5' TACGAATTCTATCTTTGGGAATTTA 3'
miR-22-S9	5' ACTCTCGTTTGACGTAGCGCTT 3'	5'CGCCCTGGCTCTGATTGGCAAG 3'

Supplementary Table 4. Sequences of miR-320 ChIP primers.

Name	Sense primer	Antisense primer
Primers for ChIP		
miR-320-S1	5' CGGGAAAAGCTGGGTTGAGAG 3'	5' AGGCGAATCCTCACATTGCG 3'
miR-320-S2	5' ACCACGCCGCAATGTGAGGAT 3'	5' AAGGTCACCATGGAGAACCCGCA 3'
miR-320-S3	5' TGTCTGCGGGTTCTCCATGGTGA 3'	5' CTTCGTGATCAGAAGCGGGTATGAC 3'
miR-320-S4	5' TGCCCAGTCATACCCGCTTCTGATC 3'	5' GGTCTGGGGGATGGGGGATAACATT 3'
miR-320-S5	5' ATCATTTCTACCAGAATGCCACGTAG 3'	5' TTGATCGCACCACTGCACTCCCGTC 3'
miR-320-S6	5' TTTGAGACGAGGTTTCTCTCTGTTG 3'	5' GTTTGGACATCTTTAAGAAACCCATG 3'
miR-320-S7	5' CTCTAAGACTGCGAAGTTTATGCCT 3'	5' GAGGTGGTTGAAGGGCAGAGAAT 3'
miR-320-S8	5' TTAGGATTCTCTGCCCTTCAACCAC 3'	5' CCCAGGATTCAACTAATGTTTGTGTA 3'
miR-320-S9	5' TCCTACACAAACATTAGTTGAATCCTG 3'	5' GGCGCGTTTCTAAAGAAACTCA 3'
miR-320-S10	5' ACGCGCCGTTGGGTACCTTCTT 3'	5' CGCCCCTTCTCTCCCAGGCAACATG 3'
miR-320-S11	5' GACGAGATCACCAGAGGGGACTGA 3'	5' TGTCGCGAGCCAAAGGCTCTC 3'
miR-320-S12	5' TGAGAGCCTTTGGCTCGCGACAC 3'	5' GCGTTGCAGGTGAGGTTGTGACG 3'
miR-320-S13	5' AACCTCACCTGCAACGCGACCAG 3'	5' GACTCCGGGAAGAACCGGGAAGAGA 3'
miR-320-S14	5' GGGAGTCAAGAAGGTACCCAAC 3'	5' TAGAATTTAAAGAGGGGTAGGCTTG 3'