

Supplementary Table 1 The sequences

Gene	Sequence
si-CASC19-1	5'-CAGCATTGCCATACTACATT-3'
si-CASC19-2	5'-CAGCACAATGATGGAAGGCTT-3'
si-CASC19-3	5'-CTGCATGCTTCTGATGTGAGT-3'
si-NC	5'-TTCTCCGAACGTGTCACGT-3'
miR-491-5p	5'-AGUGGGGAACCUUCCAUGAGG-3'
mimics	
miR-491-inhibitor	5'-CCUCAUGGAAGGGUCCCCACU-3'
miR-491-5p	5'-UUGUACUACACAAAAGUACUG-3'
mimics NC	
miR-491-5p	5'-CAGUACUUUUGUGUAGUACAA-3'
inhibitor NC	
si-HMGA2	5'-CAGCCUGAAUAACUUGAACTT-3'
si-NC	5'-UUCUCCGAACGUGUCACGUTT-3'

Supplementary Table 2 All primers in the RT-PCR

Gene	Sequence
miR-491-5p- Forward	5'-ggagtggggaacccttc -3'
miR-491-5p- Reverse	5'-gtgcagggtccgaggt -3'
U6- Forward	5'-ctcgcttcggcagcaca -3'
U6- Reverse	5'-aacgcttcacgaatttgcgt -3'
HMGA2- Forward	5'-caagttgtcagaagaagcctgc -3'
HMGA2- Reverse	5'-catggcaatacagaataagtgggtcac -3'
CASC19-Forward	5'-ttggagtgcctgggtaga-3'
CASC19-Rrverse	5'-ctgtccttgccagtgtctt-3'
GAPDH-Forward	5'-tgacttcaacagcgacacca-3'
GAPDH-Reverse	5'-caccctgttgctgtagccaaa-3'