

Figure S1. Transfection efficiency of miRNAs and the different constructs. (A) RT-qPCR was used to detect the relative expression of miR-6752-5p, miR-6832-5p, miR-6842-5p, miR-7110-5p and miR-8056 in HUVECs transfected with these miRNAs or their control. *P<0.05 and **P<0.01 vs. negative miR-Ctl. (B) RT-qPCR detected the relative expression of miR-181-3p and miR-181-5p in HUVECs transfected with miR-181-3p, miR-181-5p or their control. *P<0.05 and **P<0.01 vs. negative miR-Ctl. (C) RT-qPCR was performed in HUVECs to confirm the successful knockdown and overexpression of MIR181A2HG. *P<0.05 and **P<0.01 vs. the corresponding control. (D) RT-qPCR was performed to detect the expression of AKT2 in HUVECs transfected with pGFP-N1/AKT2 or shR-AKT2. *P<0.05 and **P<0.01 vs. the corresponding control.

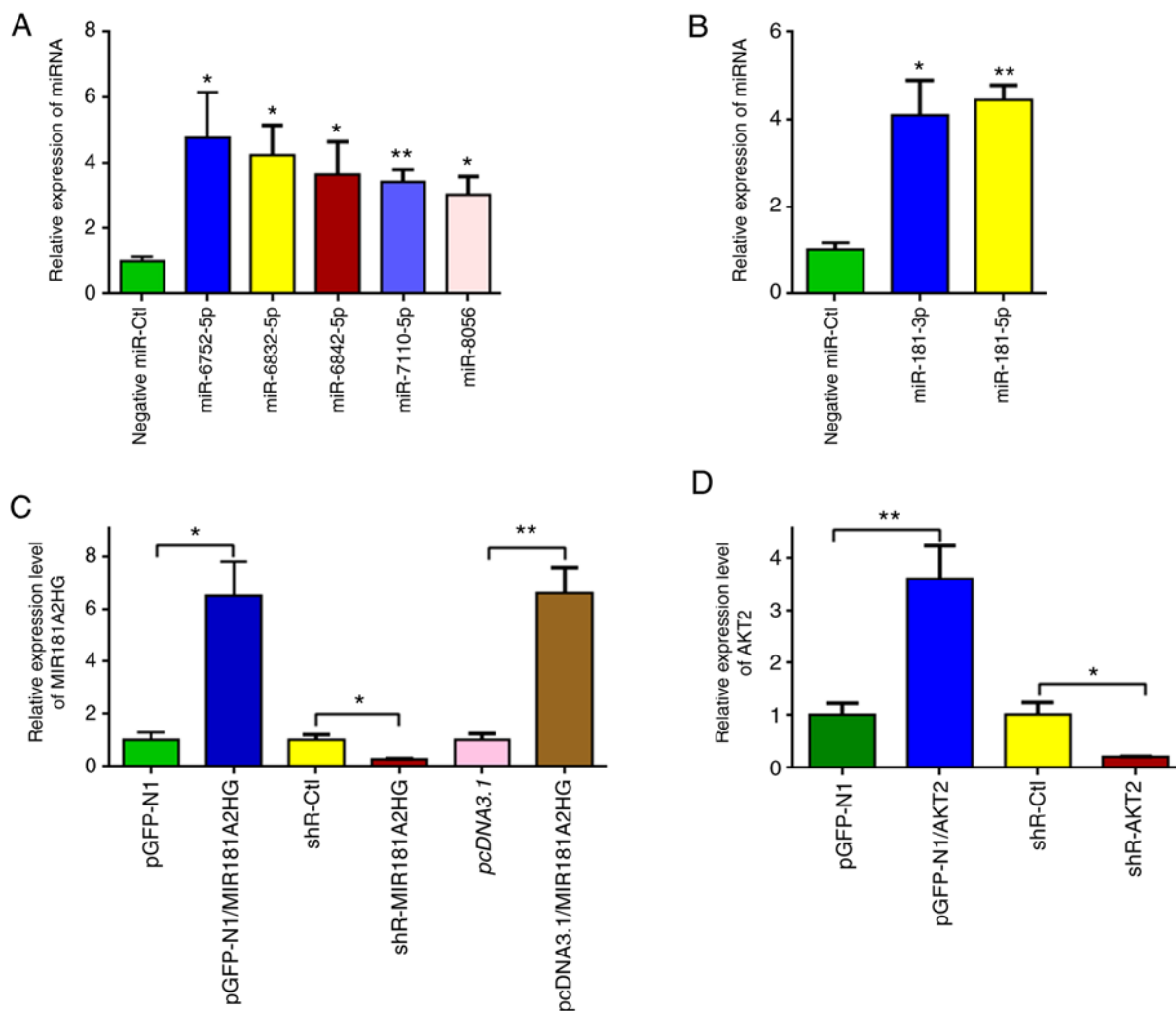


Table SI. Sequences of MIR181A2HG and mutated MIR181A2HG used in luciferase reporter assay.

lncRNA MIR181A2HG sequence	GGGCTGCAAGGAAATCTGGCGCGGTTCAATACCTCGTCTAGCCTGGGTTTC CAGTATCTAATTTTTTTTTTTGTTTTAACTGACAACTCATTTCTCTACTGGGA CAGGATGCTGTGCTGGCTGGAAGTTCATTTCTACAGCAAGAATCCTATCT GGAAACACAGAAGTTGTCCTCTAGCCACAGCAGCTCGAACTTTTTTGATT GTCGTTGCTGCTTTCTCCCATCACCCCATCCCCTTTTGACAAAGATCCAA CTGTAAAAGTCTTACGTAACAGTTCAGGACTACTTCGGTTCCTTTACTGG ATGCAGAATCTACCTACATTCGGCTGAAAATCAGATGGAAGAATCCACAGA GGAAAGGAAGGAAAGGCGAACTGTCCTGTGGAAAGCACAGCTGCAGGGA TAGTAGAAAGTAACAGGCTCTCGATCCGTGGGAGGTGGTCACTTTGGAGG ACAGATAAGTCATCCTCAGAGAACGAACACAATGAAGGAAATTCCAGCCT ATTCATGTTCTCCTCTCAGGCTGTACCTCAACAAGATCCAACCTGGACTTTG TGATCTCATAACCTGTCAAGGGGCCTGGCATGGAGTAGATAATAAATGTTT TTTTTAATC
lncRNA MIR181A2HG mut sequence	GGGCTGCAAGGAAATCTGGCGCGGTTCAATACCTCGTCTAGCCTGGGTTTC CAGTATCTAATTTTTTTTTTTGTTTTAACTGACAA ATGAT ATTT GAGATGT GGG ACAGGATGCTGTGCTGGCTGGAAGTTCATTTCTACAGCAAGAATCCTATC TGAAACACAGAAGTTGTCCTCTAGCCACAGCAGCTCGAACTTTTTTGAT TGTCGTTGCTGCA AGAGCCATCTGGGGG ATCCCCTTTTGACAAAGATCC AACTGTAAAAGTCTTACGTAACAGTTCAGGACTACTTCGGTTCCTTTACT GGATGCAGAATCTACCTACATTCGGCTGAAAAT CTCTAGGAAGATAGGTGA GAGGAAAGGAAGGAAAGGCGAACTGTCCTGTGGAAAGCACAGCTGCAGG GATAGTAGAAAGTAACAGGCTCTCGATCCGTGGGAGGTGGTCACTTTGGA GGACAGATAAGTCATCCTCAGAGAACGAACACAATGAAGGAAATTCCAGC CTATTCATGTTCTCCTCTCAGGCTGTACCTCAACAAGATCCAACCTGGACTT TGTGATCTCATAACCTGTCAAGGGGCCTGGCATGGAGTAGATAATAAATGT TTTTTTAATC

Sequences in italics indicate the wild-type of lncRNA MIR181A2HG binding to miRNAs (miR-6832-5p, miR-6842-5p and miR-8056). Sequences in bold italics indicate the mutatoin of lncRNA MIR181A2HG binding to miRNAs (miR-6832-5p, miR-6842-5p and miR-8056).