

Figure S1. Chemical structure of ginsenoside Rb2. Adapted from National Center of Biotechnology Information, Pubchem CID: 5458674 (1).

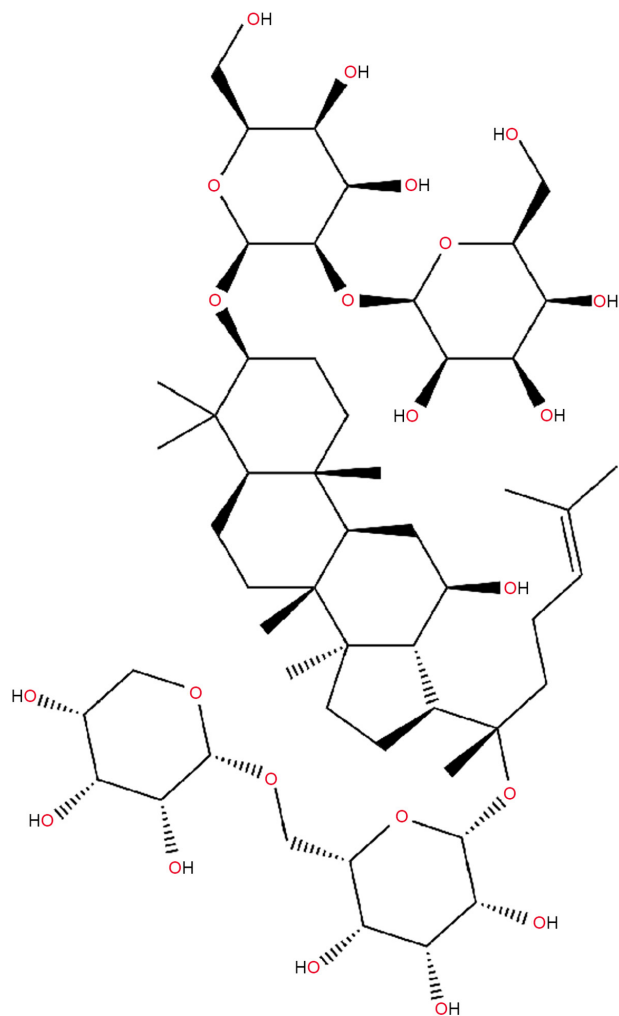


Figure S2. Expression level of miR-216a in population-doubling level 25 human umbilical vein endothelial cells transfected with Lv-miR-216a. **P<0.01 vs. Lv-NC. miR-216a, microRNA-216a; NC, negative control; Lv-miR-216a, pre-miR-216a recombinant lentiviruses.

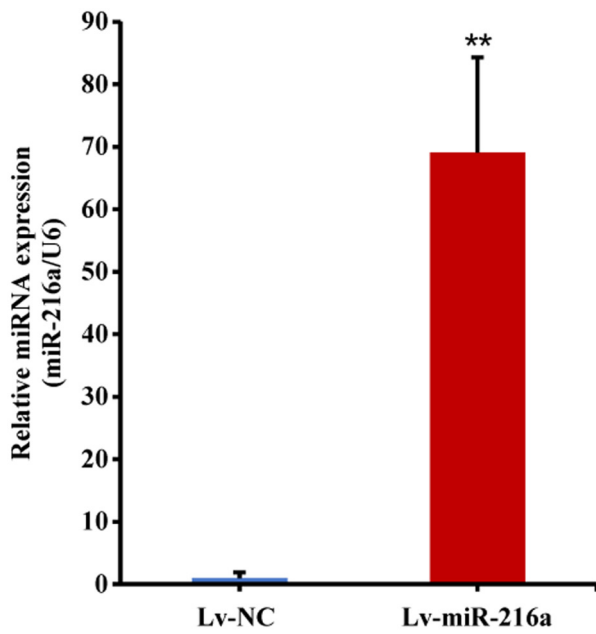


Figure S3. Effect of Rb2 on endogenous miR-216a expression in PDL44 HUVECs. A series of Rb2 concentrations (0.1, 1, 10 and 100 μ M) were applied to examine the effects of Rb2 on endogenous miR-216a expression in the senescent PDL44 HUVECs. * $P < 0.05$ vs. control group. miR-216a, microRNA-216a; HUVECs, human umbilical vein endothelial cells; PDL, population-doubling level; Rb2, ginsenoside Rb2.

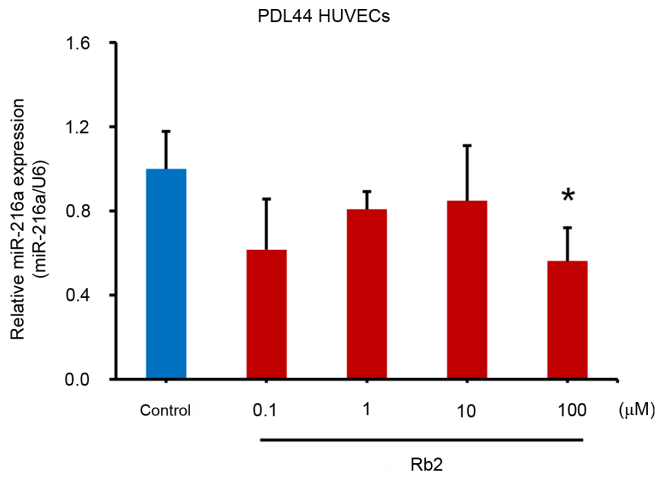


Figure S4. Effect of 10 μ M Rb2 on endogenous miR-216a expression in human aortic endothelial cells. *P<0.05 vs. control group. miR-216a, microRNA-216a.

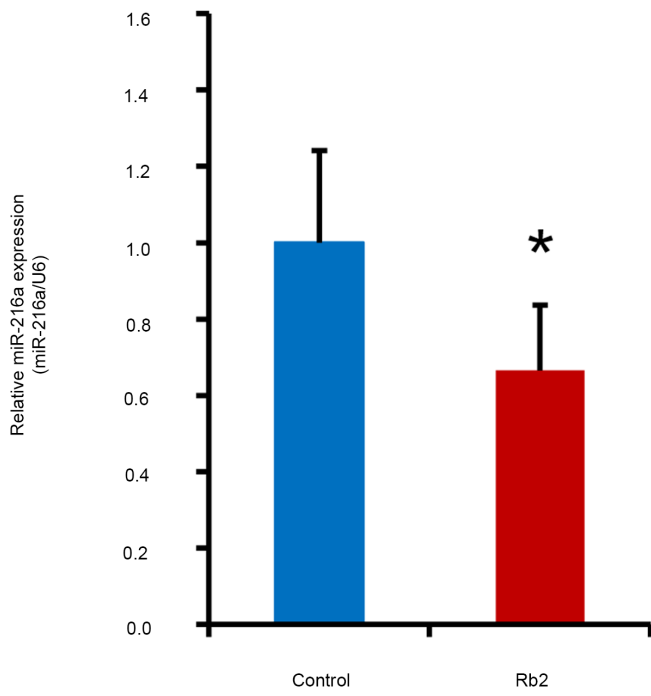


Figure S5. No effect of Rb2 on the proliferative ability of endothelial cells mediated by miR-216a in HUVECs. The cell proliferative ability was assessed in the senescent population-doubling level 25 HUVECs (at ~40 days after transfection of Lv-miR-216a) using the Cell Counting Kit-8 method, and the absorbance was detected at a wavelength of 450 nm on a LB960 microplate reader. * $P < 0.05$, ** $P < 0.01$. miR-216a, microRNA-216a; HUVECs, human umbilical vein endothelial cells; NC, negative control; Lv-miR-216a, pre-miR-216a recombinant lentiviruses.

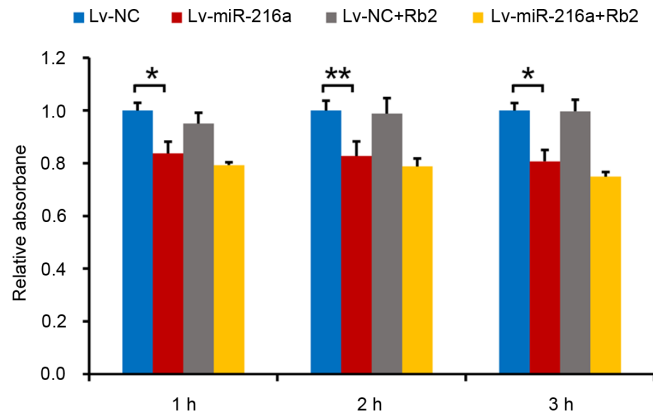


Figure S6. Expression level of miR-216a in PDL8 human umbilical vein endothelial cells transfected with miR-216a mimics. **P<0.01. miR-216a, microRNA-216a; NC, negative control.

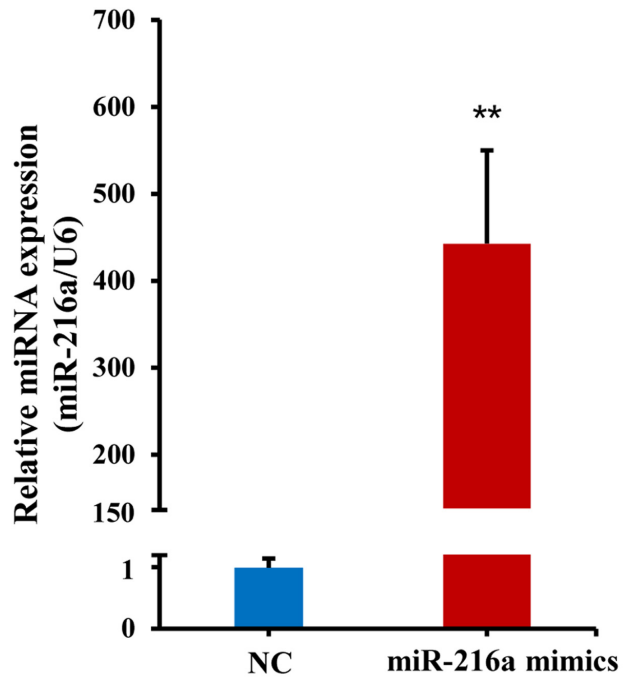


Table SI. Primers used for reverse transcription-quantitative PCR.

Gene	Direction	Sequences (5'→3')
p53	Forward	CGTGTGGAGTATTTGGATGACAGA
	Reverse	GGAGTCTTCCAGTGTGATGATGGT
p21	Forward	GAGCAGGCTGAAGGGTCCCCAGGT
	Reverse	GCTTCTGTGGGCGGATTAGGGCT
ICAM1	Forward	CCATCGGGGAATCAGTGACTGT
	Reverse	CATTATGACTGCGGCTGCTACCA
VCAM1	Forward	GATAACAACCGTCTTGGTCAGCCC
	Reverse	CGCATCCTTCAACTGGCCTT
Smad3	Forward	CGTGCGGCTCTACTACATC
	Reverse	ACATTCGGGTCAACTGGT
GAPDH	Forward	GAAGGTGAAGGTCGGAGTCA
	Reverse	GGAAGATGGTGATGGGATTTC

ICAM1, intercellular cell adhesion molecule 1; VCAM1, vascular cell adhesion molecule 1

Reference

1. Huang Q, Gao B, Jie Q, Wei BY, Fan J, Zhang HY, Zhang JK, Li XJ, Shi J, Luo ZJ, *et al*: Ginsenoside-Rb2 displays anti-osteoporosis effects through reducing oxidative damage and bone-resorbing cytokines during osteogenesis. *Bone* 66: 306-314, 2014.