

Appendix 1. The SIRT1 shRNA sequences.

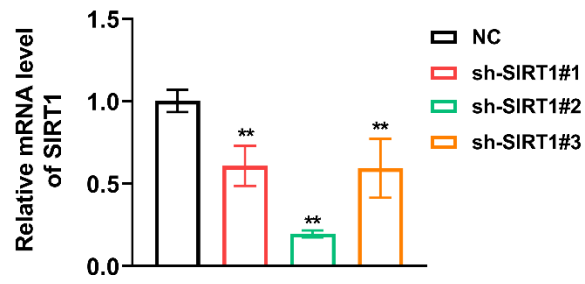
shRNAs	
SIRT1 shRNA-1	5'-GGCAGTTAATGAAGCTATA-3'
SIRT1 shRNA-2	5'-GAACAAAGTTGACGATTTA-3'
SIRT1 shRNA-3	5'-GGTTTAGTATTTATTACAA-3'
NC	5'-TTCTCCGAACGTGTCACGT-3'

Appendix 2. Primers used for RT-PCR in this study.

Primer sequence		
SIRT1	Forward	5'-CAAAATCCAGCAACTCAGCA-3'
	Reverse	5'-GATCCTTTGGATTCTGCAA-3'
ALP	Forward	5'-ACTGGTACTCAGACAACGAGAT-3'
	Reverse	5'-ACGTCAATGTCCCTGATGTTATG-3'
OCN	Forward	5'-GGCGCTACCTGTATCAATGG-3'
	Reverse	5'-GTGGTCAGCCAACTCGTCA-3'
OPG	Forward	5'-CAAAGTAAACGCAGAGAGTGTAGA-3'
	Reverse	5'-GAAGGTGAGGTTAGCATGTCC-3'
GAPDH	Forward	5'-AGACAGCCGCATCTTCTTGT-3'
	Reverse	5'-CTTGCCGTGGGTAGAGTCAT-3'

Appendix 3. ELISA detection sensitivity and detection range.

Biomarker	<i>Intra-assay</i> CV (%)	<i>Inter-assay</i> CV (%)	Detection sensitivity	Detection range
IL-6	<10%	<12%	20 pg/mL	20-10,000 pg/mL
TNF- α	3.9%	5.1%	1.04 pg/mL	18.75 - 1200 pg/mL
IL-10	<10%	<12%	10 pg/mL	10-6,000 pg/mL
TGF- β	6.8%	6.8%	7.8 pg/mL	31.25-2,000 pg/mL
MDA	< 8%	< 10%	4.688 μ M	7.813 μ M - 500 μ M
SOD	4.6%	10.5%	0.044 U/mL	0-4 U/mL



Appendix 4. The knockdown efficiency was evaluated through RT-PCR analysis. And sh-SIRT1-2 had the best efficiency, which was chosen for the next experiments.