

**Supplementary Table 5** Sequences of the primers used in qRT-PCR assay.

Target gene	Forward primer (5'-3')	Reverse primer (5'-3')	Application
<b>GAPDH</b>	ACCACAGTCCATGCCATCAC	ATGACCTTGCCCACAGCCTT	qRT-PCR
<b>RANKL</b>	ACTATTAAATGCCACCGACA	AGGGTATGAGAACCTGGGAT	qRT-PCR
<b>MAGEB2</b>	GCTGCGGGTGTTCATCCA	TGGTTAGAGGATCTTCGCTTGG	qRT-PCR
<b>MMP2</b>	GATACCCCTTGACGGTAAGGA	CCTTCTCCAAGGTCCATAGC	qRT-PCR
<b>CHST15</b>	TCGTGTGGACAGTAAGCAGAT	TGTAAGAACCCATTACCAAGGTC	Off-target analysis
<b>ULK4</b>	GAAATAACCAACTGGGTCCGT	CTGTGCAGAGTTCCACCACT	Off-target analysis
<b>SGPL1</b>	CAGCTAATTGCATGGAGTGTG	CCTTGACCATAAACTCTCTGGC	Off-target analysis
<b>TRAPPC9</b>	ACGGCTCCACACTGTATGACT	TCCTCGTAGTTGGGTAGAAAG	Off-target analysis
<b>TACR2</b>	AGCAAGTCTACCTGGCACTCT	GAAACCTGTGGTTGAGACAGC	Off-target analysis
<b>LPCAT3</b>	GGAGCTGAGCCTTAACAAGTT	CAAAGCAAAGGGTAACCCAG	Off-target analysis
<b>FRMD4A</b>	TGAAACGGGACACTTAAACTGG	AACCACGGTCCTGACTTTTT	Off-target analysis
<b>IDH2</b>	CCCGTATTATCTGGCAGTCATC	ATCAGTCTGGTCACGGTTGG	Off-target analysis
<b>FARS2</b>	CACATCCTCCTTGAGATGGAG	CCAGCCGATTGGTCTTGA	Off-target analysis
<b>KCNQ2</b>	TGCCTGGTACATCGGCTTC	GTTAGGTGTCAAAGTGGTCGTTC	Off-target analysis

Ten pairs of primers used for off-target analysis were derived from the PrimerBank [1].

## Supplementary References

1 Spandidos A, Wang X, Wang H, et al. *Nucleic Acids Res* 2010; 38:D792-799.