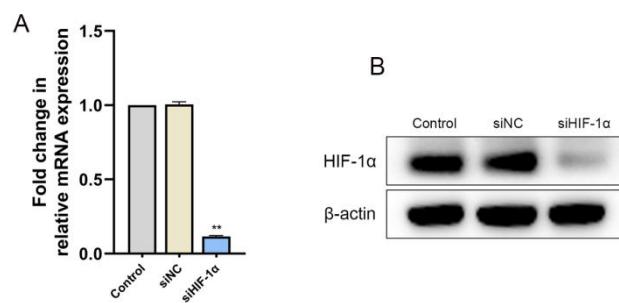


Supplementary information

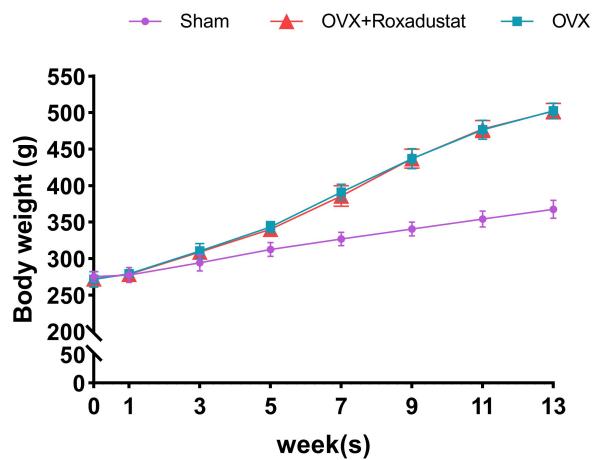
Roxadustat promotes osteoblast differentiation and prevents estrogen deficiency-induced bone loss by stabilizing HIF-1 α and activating Wnt/ β -catenin signaling pathway

Supplementary Table 1. The primer sequences for real-time PCR

Gene	Forward(5'-3')	Reverse(5'-3')
Runx2	AAATTAACGCCAGTCGGAGC	AGGACCGGGAACCACTTCTC
Sp7	AGGCCTTGCCAGTGCCTA	GCCAGATGGAAGCTGTGAAGA
Alpl	GCAGTATGAATTGAATCGGAACAAC	ATGGCCTGGTCCATCTCCAC
Bglap	TTCTGCTCACTCTGCTGACC	TGCTTGGACATGAAGGCTTG
Vegfa	GGAGTCTGTGCTCTGGGATT	CCGTTGGCACGATTAAAGAGG
Glut1	AGCAGAGGCTTGCTTAGAG	ACGGACGCGCTGTAACATATG
Pdk1	GCAGACAGCTTACCTGAATCCT	CAGTACAACCATGTATGCTCAGT
Lef1	CAGCGCGAGACAATTATGGC	AGCTTCTCTTACCACTGAAGT
Myc	TCAGCAACAACCGCAAGTG	CGTTCCAAGACGTTGTGT
Ccnd1	TGCGTGCAGAAGGAGATTGT	ACCTCCTCTCGCACCTCTG
Mmp7	GCAGAAATGTTCTGGTTAGAGAAG	TCCTTGAGGTTGTCCACTAGACTAT
Hif1 α	GAATGAAGTGCACCTAACAAAG	GAGGAATGGGTTACAAATCAG
Actb	GCAAGCAGGAGTACCGATGAGT	AAACGCAGCTCAGAACAGTC



Supplementary Figure 1. The knockdown efficiency of siRNA against HIF-1 α at the mRNA and protein levels in osteoblasts. (A) The mRNA expression of HIF-1 α 24h after transfection. (B) The protein expression of HIF-1 α 48h after transfection. Data are presented as the mean \pm SD of three independent experiments; **P<0.01, compared with the siNC group.



Supplementary Figure 2. Body weight changes during the 13-week experimental period in the Sham, OVX and OVX+Roxadustat groups. From week 3 to week 13, for each time point, $P < 0.01$ among the three groups in the analysis of variance for repeated measurements, and $P < 0.01$ between the OVX group (or OVX+Roxadustat group) and the sham group in the following multiple comparisons among the three groups. Week 0: the start time of ovariectomy; Week 1: the start time of roxadustat administration.