

Table S1 The sequences of used primers

Gene	Forward primers	Reverse primers
CBX4	5'-GCAGAGTGGAGTATCTGGTGA -3'	5'-AGCTTGGCACGGTTGTCAG- 3'
HIF-1 α	5'- CCGAATTGATGGGATATGAG-3'	5'- TCATGATGAGTTTTGGTCAGATG-3'
PDK1	5'-TCCTGTCACCAGCCAGAAAT-3'	5'-TCCTGTCACCAGCCAGAATG-3'
VEGFA	5'-CCTTGCCTTGCTCTACCTC-3'	5'-TTCTGCCCTCCTCCTTCTGC-3'
BNIP3	5'-TCTGCTGCTCTCTCATTGCTG-3'	5'-AGGTGCTGGTGGAGGTTGTC-3'
HK2	5'-GTGCCCCGCCAGAAGACATTA-3'	5'-TGCTCAGACCTCGCTCCATT-3'
ANGPTL4	5'-TCCGCAGGGACAAGAAGACTG-3'	5'-GCCGTTGAGGTTGGAATGG-3'
β -Actin	5'- CTCCATCCTGGCCTCGCTGT -3'	5'- GCTGTCACCTTCACCGTTCC -3'

Figure S 1 Knockdown of CBX4 seldom inhibited the migration and invasion ability of OS cells.

(a) (b) MNNG and MG63 cells were transfected with either scramble or CBX4 siRNA for 48h. Migration and invasion activities were measured in vitro with trans-well chambers, photos are representative fields of invasive cells on the membrane. Magnification: 100 \times . (c) (d) Quantification of data shown in (a) and (b). Bar graph presents the average numbers of cells on the underside of the membrane (means \pm s.d.).

