

**Table S4. The sequences of primer, siRNA, sgRNA, miRNA mimic and inhibitor and DNA constructs used in this study**

PX458-miR3662-sgRNA-1	forward, 5'-CACCAACAAATCAGCCAAACTCTGT-3' reverse, 5'- AAACACAGAGTTGGCTGATTGT-3'
PX458-miR3662-sgRNA-2	forward, 5'-CACCCCTCATCTTCAATATGAA-3' reverse, 5'-AAACTTCATATTGAAAATGATGAG-3'
miR3662-DNA-test	forward, 5'-GTCACTTATGTTAGGGTG-3' reverse, 5'-CACCTCGATATCAAACCATA-3'
pSLQ2837-gRNA1	GAGAACACCTTGTGactgagtgtacatgtccatGTTAAGAGCTAAGCTGGAAACAG
pSLQ2837-gRNA2	GAGAACACCTTGTGcaatcaagaactatccacagGTTAAGAGCTAAGCTGGAAACAG
pSLQ2837-gRNA3	GAGAACACCTTGTGgaaacagtgtaacatgattGTTAAGAGCTAAGCTGGAAACAG
RNU6B	forward, 5'-CCCTGACACGCAAATTCTGTGAAG-3' reverse, miScript SYBR Green PCR kits Universal Primer
hsa-mir16-5p	forward, 5'-CCCTAGCAGCACGTAATATTGGCG-3' reverse, miScript SYBR Green PCR kits Universal Primer
HBP1	forward, 5'-CGACCAGTCCACAAAGTCCA-3' reverse, 5'- TCACTATTTGCCCTTCTGTGTC-3'
GAPDH	forward, 5'-CCCCTCATTGACCTCACTACAT-3' reverse, 5'-CGCTCCTGGAAGATGGTGA -3'
pmirGLO-HBP1-3'UTR-WT	forward, 5'-AAACTAGCGGCCGCTAGTAGCTAAACTATCAACATTTAAT -3' reverse, 5'-CTAGATTAATGTTGATAGTTTAGCTACTAGCGGCCGCTAGTTT-3'
pmirGLO-HBP1-3'UTR-MUT	forward, 5'-AAACTAGCGGCCGCTAGTAGCTAAACTATCAAAT-3' reverse, 5'-CTAGATTTGATAGTTTAGCTACTAGCGGCCGCTAGTT -3'
miR-3662-mimics	Sense 5'-AAAAAUGAUGAGUAGUGACUGAUG-3'
miR-3662-inhibitor	Sense 5'-CAUCAGUCACUACUCAUUUUC-3'
miRNA negative control	Sense 5'-UUCUCCGAACGUGUCACGUTT-3'
HBP1 siRNA-1	AAUUUAAAAAAUAUGUAACCTT GUUACAUUUUUUUAAAUTTGG
HBP1 siRNA-2	GCCAGAGGCUACCAGAACTT GUUCUGGUAGGCCUCUUGGCTTGU
PX458 vector	pSpCas9(BB)-2A-GFP
pSLQ2837 vector	pLenti U6-spsgTRE3G CMV-mIFP

pSLQ1922 vector	KRAB-Spdcas9,PiggyBac-Tre3g-KRAB-dcas9(Bstx1)-2NLS-p2A-sfGFP-SV40polyA/R (EF1a-Zeocin-f2A-rtTA-1)
pSLQ1932 vector	VPR-Spdcas9,PiggyBac-Tre3g-dcas9-VRP- sfGFP- SV40polyA/R (EF1a-Zeocin-f2A-rtTA-1)