

Supplementary table-1: Related gene primers mentioned in this article

Gene	sequence
lncRNABDNF-AS	F: 5' -CCGTGAGAAGATCTCATTGGGC-3' . R: 5' -TGGGTCACAAGTCACGTAGC-3' .
lncRNABDNF-AS FISH probe sequence (5' -3')	cttaag+tgagcctaag+atacatttaga+tgaatttgtgc+tggtgtttcaagagc+ttgacatca+ttg.
lncRNABDNF-AS + WDR5-CHIP-primers	
Site1	F1: 5' -ACAGTCCCCATGTATCGGTC-3' . R1: 5' -TGCAATGGAAGCAAATAGACCTT-3' (71bp).
Site2	F2: 5' -TGGGAAGACTTGCCGAGTT-3' . R2: 5' -ACCAAACAGATTTGCTCCCATC-3' (94bp).
Site3	F3: 5' -AAGGGTTCGAAGCGATTGGG-3' . R3: 5' -CTTGC GGCTTTTTAGGTCCG-3' (140bp).
lncRNABDNF-AS + H3K4me27-CHIP-primers	
Site1	F1: 5' -CCGAATACAAGCGAGGT-3' . R1: 5' -GCACAGACTACACTCATTG-3' (129bp).
Site2 (paper use)	F2: 5' -CAGGCAATGAGTGTAGTCT-3' . R2: 5' -AAGGCACAGCACAATAA-3' (156bp).
Site3	F3: 5' -TTAGTTGTGCTGTGCCTTG-3' . R3: 5' -TCTCTGTGCCTGGCTCTA-3' (100).
FBXW7	F: 5' -GTGGGACATACAGGTGGA-3' . R: 5' -CAACGCACAGTGAAGTA-3' .
FBXW7 knockdown plasmid sequences	
FBXW7-RNAi (71227-1)	TGGAATGGA ACTCAAAGACAA.
FBXW7-RNAi (71228-1)	CCATGCAAAGTCTCAGAATAT.
FBXW7-RNAi (71229-1)	ACCTACAGACTAAGAAGGAAA.
WDR5:	F: 5' -AATATCCGATGTAGCCTGGTC-3' . R: 5' -TTGGACTGGGGATTGAAGTTG-3' .
METTL3	F: 5' -CCAGCACAGCTTCAGCAGTTC-3' . R: 5' -GCGTGGAGATGGCAAGACAGATG-3' .
SETD3	F: 5' -GACAGACTCTACGCCATG-3' . R: 5' -GTCTCCCAGCAAGTGTTTC-3' .
KMT2C	F: 5' -AAGCAAACGACTCAGAGGA-3' . R: 5' -ACAAGCCATAGGAGGTGGTG-3' .
KMT2D	F: 5' -AGCCTCCGCACCAACAATC-3' . R: 5' -AGCTCCTCGCCCTTCAGATA-3' .
WDR5 overexpression plasmid sequences	
pCDNA-WDR5-1	CACACTGGACTAGTGGATCCCGCCACCATGGCG+ACGGAGGAGAAGAAG.

pDNA-WDR5-2	AGTCACTTAAGCTTGGTACGCAGTCACTCTCC+ ACAGTTTAATTG.
VDAC3	F:5' -CTGGGAGAATAAGTTGGCTGAA-3' . R:5' -AAGTCCGCAGCCTTGTAACC-3' .
WDR5-interference sequences	
Si-WDR5-1	GCUCAGAGGAUAACCUUGUTT+ ACAAGGUUAUCCUCUGAGCTT GGAUCCUUGAUAGUUUCAATT+
Si-WDR5-2	UUGAAACUAUCAAGGAUCCTT
β -actin	F:5' -GACCACCTTCAACTCCATCAT-3' . R:5' -CCTGCTTGCTAATCCACATCT-3' .
U6	F:5' -CTCGCTTCGGCAGCACA-3' . R:5' -CTCAACTGGTGTCTGTGGA-3' .
GAPDH:	F:5' -GGAAGCTTGTCAATGGAAATC-3' . R:5' -TGATGACCCTTTTGGCTCCC-3' .
lncRNABDNF-AS CHIRP primers	
lnc40024687-NC	TACGCACCACTAGTCGTACT-/3bio/
lnc40024688	ATACAAGGGCAGGAAGGAGA-/3bio/
lnc40024689	TGAGCCTAAGATACATTGCT-/3bio/
lnc40024690	CGTGATAGAAGAGCTGTTGG-/3bio/
lnc40024691	GGCAGGTTCAAGAGGCTTGA-/3bio/
lnc40024692	AAACAGGATGGCTCAATGAA-/3bio/
lnc40024693	CCTTGGGCTCATCTCTACAG-/3bio/
lnc40024694	GATTTCCAGATAAACAAGGC-/3bio/
lnc40024695	AGGGAGCCAACAAACAACCTG-/3bio/
lnc40024696	TTGGCTGACACTTTCGAACA-/3bio/
lnc40024697	ATAGTAGGTCAACATTGGTG-/3bio/
lnc40024698	AGCCTTTCATAGCCCATTCA-/3bio/
lnc40024699	AGGGAGCCAACAAACAACCTG-/3bio/
FBXW7 promoter-Q-MSP-primers	
ME039-S5-MF	F:5' -CGAGTTTGAGTCGGAGTCGGC-3' .
ME039-S5-MR	R:5' -CGAAACGAAACAAAACTCTAACG-3' .
ME039-S5-UF	F:5' -GTTTGAGTTTGAGTTGGAGTTGGT-3' .
ME039-S5-UR	R:5' -CACAAAACAAAACAAAACTCTAACG-3' .

Supplementary figure 1

