

Table S1. The primers used in the study
Sites for restriction enzymes are underlined.

Primer name	Primer sequence (5'-3')	PCR
Primers for making constructs		
EZH2-5'	CGCGGATCCATGGGCCAGACTGGGAAGAAAT	94 °C, 30 s; 58 °C, 30 s; 72 °C, 90 s;
EZH2-3'	CCGCTCGAGTCAAGGGATTCCATTTCTCTTTC	35 cycles
SUZ12-5'	CCGCTCGAGATGGCGCCTCAGAAGCACG	94 °C, 30 s; 58 °C, 30 s; 72 °C, 90 s;
SUZ12-3'	CCGGAATTCTCAGAGTTTTTGTGTTTTTGCTCTG	35 cycles
EED-5'	CGCGGATCCATGTCCGAGAGGGAAGTGTC	94 °C, 30 s; 58 °C, 30 s; 72 °C, 60 s;
EED-3'	CCGCTCGAGTTATCGAAGTCGATCCCAGC	35 cycles
EZH2-RM-5'	GATGGAAGTAGTAATCACGTTTACAACCTATCAACCCTG	
EZH2-RM-3'	ACGTGATTACTACTTCCATCCTTTTTTCAGCTGTATCTTTC	
Luc2-5'	CGCGGATCCAATGGAAGATGCCAAAAACATTA	94 °C, 30 s; 58 °C, 30 s; 72 °C, 90 s;
Luc2-3'	CCAGCGGCCGCTTACACGGCGATCTTGCCG	35 cycles
Rluc-5'	ACGCGTCGACGCCACCATGACTTCGAAAGT	94 °C, 30 s; 58 °C, 30 s; 72 °C, 90 s;
Rluc-3'	CGCGGATCCCTCGAGTTGTTTCAATTTTGAGAACTCGC	35 cycles
miniEZH2-5'	ACGCGTCGACGCCACCATGTGGGCTGCACACTGCAGAA	94 °C, 30 s; 58 °C, 30 s; 72 °C, 60 s;
miniEZH2-3'	CGCGGATCCCCTTTTTGGAGCCCCGCTGAAT	35 cycles
mutExon14-5'	TGTAGTTCATAGTGTAAGTATTTGTGCTTTG	
mutExon14-3'	ACTTACACTATGAACTACATTGACAAAACCT	
BSD-5'	ACGCGTCGACGCCACCATGGCCAAGCCTTTGTCTCAA	94 °C, 30 s; 58 °C, 30 s; 72 °C, 40 s;
BSD-3'	CGCGGATCCCTCGAGGCCCTCCACACATAACCAGA	35 cycles
Primers for making shRNA and sgRNA plasmids		
EZH2-1#-F	TGGACGGCTCCTCTAACCATGTTTCAAGAGAACATGGTTAGAGGAGCCGTCCTTTTTTC	
EZH2-1#-R	TCGAGAAAAAAGGACGGCTCCTCTAACCATGTTCTCTTGAACATGGTTAGAGGAGCCGTCCTCA	
EZH2-2#-F	TGAAATCTGAGAAGGGACCAGTTCAAGAGACTGGTCCCTTCTCAGATTTCTTTTTTC	
EZH2-2#-R	TCGAGAAAAAAGAAATCTGAGAAGGGACCAGTCTCTTGAACCTGGTCCCTTCTCAGATTTCA	
hnRNPA1-1#-F	TGAGAGCTGTCTCCAGAGAAGATTCAAGAGATCTTCTCTGGAGACAGCTCTCTTTTTTC	
hnRNPA1-1#-R	TCGAGAAAAAAGAGAGCTGTCTCCAGAGAAGATCTCTTGAATCTTCTCTGGAGACAGCTCTCA	
hnRNPA1-2#-F	TGGAACAGTTCGGTAAGCTCTTCAAGAGAGAGCTTACGGAAGTTCCTTTTTTC	
hnRNPA1-2#-R	TCGAGAAAAAAGGAACAGTTCCGTAAGCTCTCTTGAAGAGCTTACGGAAGTTCCTCA	
hnRNPA2-1#-F	TGGAACAGTTCGGTAAGCTCTTCAAGAGAGAGCTTACGGAAGTTCCTTTTTTC	
hnRNPA2-1#-R	TCGAGAAAAAAGGAACAGTTCCGTAAGCTCTCTTGAAGAGCTTACGGAAGTTCCTCA	
hnRNPA3-1#-F	TGAGAGCTGTTTCTAGAGAGGATTCAAGAGATCCTCTCTAGAAACAGCTCTCTTTTTTC	
hnRNPA3-1#-R	TCGAGAAAAAAGAGAGCTGTTTCTAGAGAGGATCTCTTGAATCCTCTCTAGAAACAGCTCTCA	
hnRNPA3-2#-F	TGAAACACCTGCTGACTTGCAGTTCAAGAGACTGCAAGTCAGCAGGTGTTCTTTTTTC	
hnRNPA3-2#-R	TCGAGAAAAAAGAAACACCTGCTGACTTGCAGTCTCTTGAAGTCAAGTCAGCAGGTGTTCA	
PTBP1-1#-F	TGTGACCTTAGCAGACCAGAGATTCAAGAGATCTCTGGTCTGCTAAGGTCACCTTTTTTC	
PTBP1-1#-R	TCGAGAAAAAAGTGACCTTAGCAGACCAGAGATCTCTTGAATCTCTGGTCTGCTAAGGTCACA	
PTBP1-2#-F	TGAAGCCGGGCTCCAAGAAGTCAAGAGAGTTCTTGGAGCCCGGCTCTTTTTTC	
PTBP1-2#-R	TCGAGAAAAAAGAAGCCGGGCTCCAAGAAGTCTCTTGAAGTCTTGGAGCCCGGCTTCA	
SRSF1-1#-F	TGAAGATATGACCTATGCAGTTCAAGAGACTGCATAGGTCATATCTTCTTTTTTC	
SRSF1-1#-R	TCGAGAAAAAAGAAGATATGACCTATGCAGTCTCTTGAAGTCAAGGTCATATCTTCA	

hnRNPC1-1#-F	TGAGACGAAGACTGAGCGGTTGTTCAAGAGACAACCGCTCAGTCTTCGTCTCTTTTTTC
hnRNPC1-1#-R	TCGAGAAAAAAGAGACGAAGACTGAGCGGTTGTCTCTTGAACAACCGCTCAGTCTTCGTCTCA
hnRNPM-1#-F	TGATACAGAGCCTTCATTACATTCAAGAGATGTAATGAAGGCTCTGTATCTTTTTTC
hnRNPM-1#-R	TCGAGAAAAAAGATACAGAGCCTTCATTACATCTCTTGAATGTAATGAAGGCTCTGTATCA
hnRNPH3-1#-F	TGTAGCAGGAGTGAAATCAAAGGATTCAAGAGATCCTTTGATTTCACTCCTGCTACTTTTTTC
hnRNPH3-1#-R	TCGAGAAAAAAGTAGCAGGAGTGAAATCAAAGGATCTCTTGAATCCTTTGATTTCACTCCTGCTACA
SRPK2-1#-F	TGACATGGTGGTCCAGCTCATTCAAGAGATGAGCTGGACCACCATGTCTTTTTTC
SRPK2-1#-R	TCGAGAAAAAAGACATGGTGGTCCAGCTCATCTCTTGAATGAGCTGGACCACCATGTCA
SRPK3-1#-F	TGAGAGACCATTGTCCAGCTCATTCAAGAGATGAGCTGGACAATGGTCTCTCTTTTTTC
SRPK3-1#-R	TCGAGAAAAAAGAGAGACCATTGTCCAGCTCATCTCTTGAATGAGCTGGACAATGGTCTCTCA
SRPK3-2#-F	TGCGCTTTGTGGCCCTCAAAGTTCAAGAGACTTTGAGGGCCACAAAGCGCTTTTTTC
SRPK3-2#-R	TCGAGAAAAAAGCGCTTTGTGGCCCTCAAAGTCTCTTGAACCTTTGAGGGCCACAAAGCGCA
PRPF3-1#-F	TGACAGTGAAGAGGGTCTGGGTTCAAGAGACCAGGACCCTCTTCACTGTCTTTTTTC
PRPF3-1#-R	TCGAGAAAAAAGACAGTGAAGAGGGTCTGGGTTCTTGAACCCAGGACCCTCTTCACTGTCA
PRPF3-2#-F	TGGCAGCCGATCATCTGAAACCTTCAAGAGAGGTTTCAGATGATCGGCTGCCTTTTTTC
PRPF3-2#-R	TCGAGAAAAAAGGCAGCCGATCATCTGAAACCTCTCTTGAAGGTTTCAGATGATCGGCTGCCA
PSIP1-1#-F	TGGTCGGCCATCATTCTGTTTTCAAGAGAAACAGGAATGATGGCCGACCTTTTTTC
PSIP1-1#-R	TCGAGAAAAAAGGTTCGGCCATCATTCTGTTTTCTCTTGAACAGGAATGATGGCCGACCA
SFPQ-1#-F	TGATCTACAGGGAAAGGCATTGTTCAAGAGACAATGCCTTTCCCTGTAGATCTTTTTTC
SFPQ-1#-R	TCGAGAAAAAAGATCTACAGGGAAAGGCATTGTCTCTTGAACAATGCCTTTCCCTGTAGATCA
SF3A1-1#-F	TGAAGCATCTTCAAAGGAGGATTCAAGAGATCCTCCTTTGAAGATGCTTCTTTTTTC
SF3A1-1#-R	TCGAGAAAAAAGAAGCATCTTCAAAGGAGGATCTCTTGAATCCTCCTTTGAAGATGCTTCA
SF3A2-1#-F	TGGTCAAGGTGGAGGTGAAGAAGTTCAAGAGACTTCTTCACCTCCACCTTGACCTTTTTTC
SF3A2-1#-R	TCGAGAAAAAAGGTCAAGGTGGAGGTGAAGAAGTCTCTTGAACTTCTTCACCTCCACCTTGACCA
SF3A3-1#-F	TGAGATACCTAGAGATGCTGCTTCAAGAGAGCAGCATCTCTAGGTATCTCTTTTTTC
SF3A3-1#-R	TCGAGAAAAAAGAGATACCTAGAGATGCTGCTCTCTTGAAGCAGCATCTCTAGGTATCTCA
SF3B1-1#-F	TGCTCAAGGAGTGGGCCTCGA TTCAAGAGATCGAGGCCACTCCTTGAGCTTTTTTC
SF3B1-1#-R	TCGAGAAAAAAGCTCAAGGAGTGGGCCTCGATCTCTTGAATCGAGGCCACTCCTTGAGCA
SF3B3-1#-F	TGAGTGGATGCCGTCGCATCGTTCAAGAGACGATGCGACGGCATCCACTCTTTTTTC
SF3B3-1#-R	TCGAGAAAAAAGAGTGGATGCCGTCGCATCGTCTCTTGAACGATGCGACGGCATCCACTCA
SF3B3-2#-F	TGAAGTGGATGACTCCTTCCTTCAAGAGAGGAAGGAGTCTACTCAGTCTTTTTTC
SF3B3-2#-R	TCGAGAAAAAAGAAGTGGATGACTCCTTCCTCTCTTGAAGGAAGGAGTCTACTCAGTTCA
LacZ-F	TGTGACCAGCGAATACCTGTTTCAAGAGAACAGGTATTTCGCTGGTCACTTTTTTC
LacZ-R	TCGAGAAAAAAGTGACCAGCGAATACCTGTTTCTCTTGAACAGGTATTTCGCTGGTCA
sgEZH2-F	CACCGACACGCTCCGCCAACAAC
sgEZH2-R	AAACGTTTGTGGCGGAAGCGTGTC
sgHOTAIR-1#-F	CACCGGACCCCTGCCAGGTCTAGC
sgHOTAIR-1#-R	AAACGCTAGACCTGGCAGGGGGTCC
sgHOTAIR-2#-F	CACCGGAGAGAGACACGTGAGACCC
sgHOTAIR-2#-R	AAACGGGTCTCACGTGTCTCTCTCC
sgHOTAIR-3#-F	CACCGGCCCTTCTCCTAGCCACCG
sgHOTAIR-3#-R	AAACCGGTGGGCTAGGAGAAGGGCC

Primers for real-time quantitative PCR analysis		
GAPDH	F: CCTTCATTGACCTCAACTACA R: GCTCCTGGAAGATGGTGAT	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
HOTAIR	F: TTCGCAGTGAATGGAACGGA R: TACCAGGTCGGTACTGGCTT	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
HOXA9	F: TTGGAGGAAATGAATGCTGA R: TGGTCAGTAGGCCTTGAGGT	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
DAB2IP	F: TGGACGATGTGCTCTATGCC R: GGATGGTGATGGTTTGGTAG	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3A1	F: AGGAAGTTGAGATGGAGGTCC R: CTTGCGGACAATGACTTGGTC	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3A2	F: GTGTCTCCCAGTCTGCTAAA R: AGGCAGAGTTTGCATTCATAG	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3A3	F: TGTGGAAACTACACCTACCGA R: CCAAAAGCTGAGCTACATCC	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3B1	F: CACAGACCTCCAAAGATTGC R: GCTGCTCCATTGACGACTT	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3B2	F: TTACGAGCCCAACTTTATCT R: GTGAAGCGGTTTCATTCCG	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3B3	F: GGCGAGCCGTTATGATTAGT R: AGGTCTAGCTCATAGAAAGTAAG	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
SF3B4	F: CCAGTAGTCAACACCCACAT R: ATGCTTTGTTACCCGTATT	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
EZH2 (Total)	F: TTCTGTGCCATTGCTAGGTTA R: CTTTTCTTGGAGGAGTATC	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
EZH2-E14 (exon14 containing only)	F: GTCAAAGAATCTAGCATCATAGCTC R: TAGTTGTAAACATGGTTAGAGG	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
Primers for RT-PCR analysis		
AsEZH2	F: CACTGCAGAAAGATACAGCT R: CAAGTAAGACAGAGGTCAGGGT	94°C, 30s; 58°C, 30s; 72°C, 30s; 40 cycles
CKO-Target	F: TGTTCCTATAATATGGCCGCA R: TTACACGCTTCCGCCAACA	94°C, 30s; 58°C, 30s; 72°C, 30s; 40 cycles
CKO-Exon3	F: ACAGATGTGGTGTGTTTTGTATTATT R: ATGTTATGTTAACCAACCTCCCTA	94°C, 30s; 58°C, 30s; 72°C, 30s; 40 cycles
Primers for ChIP-qPCR analysis		
HOXA9 (promoter)	F: TCGCCAACCAACACAACAGTC R: AAAGGGATCGTGCCGCTCTAC	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles
HOXA9 (Exon 2)	F: CATAGATTCATCTTTCTCCAC R: ACACAACAATTTGGTCAGTAGG	95°C, 15s; 60°C, 15s; 72°C, 45s; 40 cycles