

**Supplementary information, Table S1** Nucleotide sequences of RNAs and primers used in experiments

Purposes	Targets	Sequences (5' to 3')	
shRNAs	Non-targeting control	CTAGCAAAAACGCTGAGTACTTCGAAATGTCCTCGAGG ACATTTCGAAGTACTCAGCGCC	
	Mouse PHF2	CTAGCAAAAACGTGGCTATTAAAGTGTCTACTCGAGT AGAACACTTAATAGCCACGCC	
	Rat PHF2-I	AATTAAAAAGAAGAAAGGGAAGAAGTGCAACTCGAGT TGCACTTCTCCCTTCTTC	
	Rat PHF2-II	AATTAAAAACAAAGAGCGTCCTGAGTGTCCCTCGAGG AACACTCAGGACGCTTTG	
siRNAs	Non-targeting control	AUGAACGUGAAUUGCUCUATT	
	Mouse Suv39H1-I	UCUUUCUAAGGUCCUUGUG	
	Mouse Suv39H1-II	GUUGUCUAUGAAUACGUU	
		Forward primers (5' to 3')	Reverse primers (5' to 3')
RT-qPCR	Mouse ALP	CCAACTCTTTGTGCCAG AGA	GGCTACATTGGTGTGAG CTTTT
	Mouse OCN	GCAATAAGGTAGTGAAC AGACTCC	GTTTGTAGGCGGTCTTCA AGC
	Mouse BSP	AAGCAGCACCGTTGAGT ATGG	CCTTGTAGTAGCTGTATT GTCCTC
ChIP PCR	Proximal OCN promoter	CGTCCACTCCCAGAGCCT T (P2)	CTCAGTGGGTCAAACCCA AAG (P1)
	Distal OCN promoter	CCCACAATGGGCTAGGCT C (P4)	TGCCTCCATAAGATCCGG TT (P3)