

Table S1. Primer sequences:

	<i>Primer</i>	<i>Primer sequences</i>
shRNA	Human SET1A-1	Target: 5' GGAAAGAGCCATCGGAAAT 3'
	Human SET1A-2	Target: 5' GACAACAACGAATGAAATA3'
	Human SET1A-3	Target: 5' CAACGACTCAAAGTATATA 3'
	Mouse SET1A-1	Target: 5' GCAAGAAGGAGAAAGATAA 3'
	Mouse SET1A-2	Target: 5' CGGAAAGAGCCATCAGAAA 3'
	shScramble	Target: 5' TAGCGACTAAACACATCAA 3'
RT-PCR	Mouse β -actin	For: GTGGGCCGCTCTAGGCACCA Rev: TGGCCTTAGGGTGCAGGGGG
	Human β -actin	For: AGAAAATCTGGCACCACACC Rev: AGAGGCGTACAGGGATAGCA
	HoxB4 (both for human & mouse)	For: TGGATGCGCAAAGTTCACG Rev: GGTCTTTTTTCCACTTCATGCG
	Human Meis1	For: TCACACTGGCCTTAAAGAGGA Rev: CCGTAATGGGGTAGATCGTC
	Human HoxB3	For: AGTACAAGAAGGACCAGAAGGC Rev: TGGAGTGTAAGGCGTTCATG
	Human HoxC9	For: ACGAGGAAGAAGCGCTGCCCC Rev: GAGAACCCGGGCCACCTCATA
	Mouse Oct4	For: GGC GTTCTCTTTGGAAAGGTGTTC Rev: CTCGAACCACATCCTTCTCT
	Mouse Nanog	For: AGGGTCTGCTACTGAGATGCTCTG Rev: CAACCACTGGTTTTTCTGCCACCG
	Mouse USF1	For: GATGAGAAACGGAGGGCTCAACATA Rev: TTAGTTGCTGTCATTCTTGATGACG
	Mouse SET1A	For: CAGACGGGCTTGTAGATTCC Rev: GAGGCTGTGGTACACTAGG
	Mouse Tal1	For: TAGCCTTAGCCAGCCGCTCG Rev: GCGGAGGATCTCATTCTTGC
	Mouse CD41	For: GAACCTGGAAGAAGCTGGCG Rev: CTCCACTGTGGCTTCAGCTTG
	Mouse T	For: GCTCTAAGGAACCACCGGTCATC Rev: ATGGGACTGCAGCATGGACAG
	Mouse FLK1	For: ACTGCAGTGATTGCCATGTTCT Rev: TCATTGGCCCCGCTTAACG
	Mouse GATA4	For: GATGGGACGGGACACTACCTG Rev: ACCTGCTGGCGTCTTAGATTT
	Mouse GATA6	For: GACGGCACCGGTCATTACC Rev: ACAGTTGGCACAGGACAGTCC
	Mouse FGF5	For: ACCCGGATGGCAAAGTCAA Rev: CAATCCCCTGAGACACAGCAA
	Mouse Nestin	For: CTGCAGGCCACTGAAAAGTT Rev: GACCCTGCTTCTCCTGCTC

Mouse CD34	For: CTCTAGATCACAGTTCTGTGTCAGC Rev: TAGCACAGAACTTCCCAGCAAAC
Mouse c-Myb	For: AACGAGCTGAAGGGACAGCA Rev: TGGCATGGTGTCTCCCAA
Mouse CD150	For: ACAGGCGTGCTTATGAAGTAGATG Rev: CCACGGGATCTCTG CTTCATAT
Mouse $\epsilon\gamma$	For: AACCTCATCAATGGCCTGTGG Rev: TCAGTGGTACTTGTGGGACAGC
Mouse β H1	For: AGTCCCCATGGAGTCAAAGA Rev: CTCAAGGAGACCTTTGCTCA
Mouse MixL1	For: AACCGACGGGCCAAGTC Rev: TCCCCGCCTTGAGGATAAG
Mouse Mesp1	For: GTTCCTGTACGCAGAAACAGCATC Rev: CAAGGAGGGTTGGAATGGTACAGT
Mouse Snai2	For: CTTTACCAGTGGCCTTTCTC Rev: CCACAGATCTTGCAGACACAA
Mouse Eomes	For: ACCAATAACAAAGGTGCAAACAAC Rev: TGGTATTTGTGCAGAGACTGCAA
Mouse NKX2-5	For: CAGTGGAGCTGGACAAAGCC Rev: TAGCGACGGTTCTGGAACCA

CHIP	HoxB4 Promoter (both for human & mouse)	For: GCCTCTAACTTTGTTCACTTGAC Rev: AGCCATTAATTTCTGGGAATTGC
	Human HoxB4 3'UTR	For: CCCCGGAAAATCTATCTGC Rev: CCAAAGCTGAAAACGAGGAG
	mouse HoxB4 -5.8kb	For: AGGGGGCTGTATGTGTGAAG Rev: GGGAGAGAAAATCGTGTGGA
	mouse HoxB1 US	For: AGGAAGATGAATCAAGAAG Rev: CAGAAGCACTAAGAGAAG
	mouse Tal1 Pro1a	For: AGGCTAGACAACGGCCAAAG Rev: AAACAACCCGACTCGGATCTC
	mouse Runx1 P1	For: CACAAATAACAACAGGATCTGAAAGC Rev: TCCCCTGCCTCAGTCTTTTCT
	mouse Runx1 P2	For: CCCAGGCTGATACCGGAAA Rev: TCCCTCAGCTCGTTTGCATA
	mouse EPB4.2	For: GCAGGTCATCTCAAAGAGC Rev: CGAACCCAACTCTGAACCTC
	Human necdin pro	For: TTCGTCCAAATGAATTACCTGAAG Rev: GGAGCCCCAAAAGAACTCGTA
	mouse Tal1 -10kb	For: CAAATCAGAAGAAAAGACCTGCAA Rev: TTTCATTTTCCTTCCCTCAATCTC
