

**Table S1****Primer pairs for Real-Time PCR**

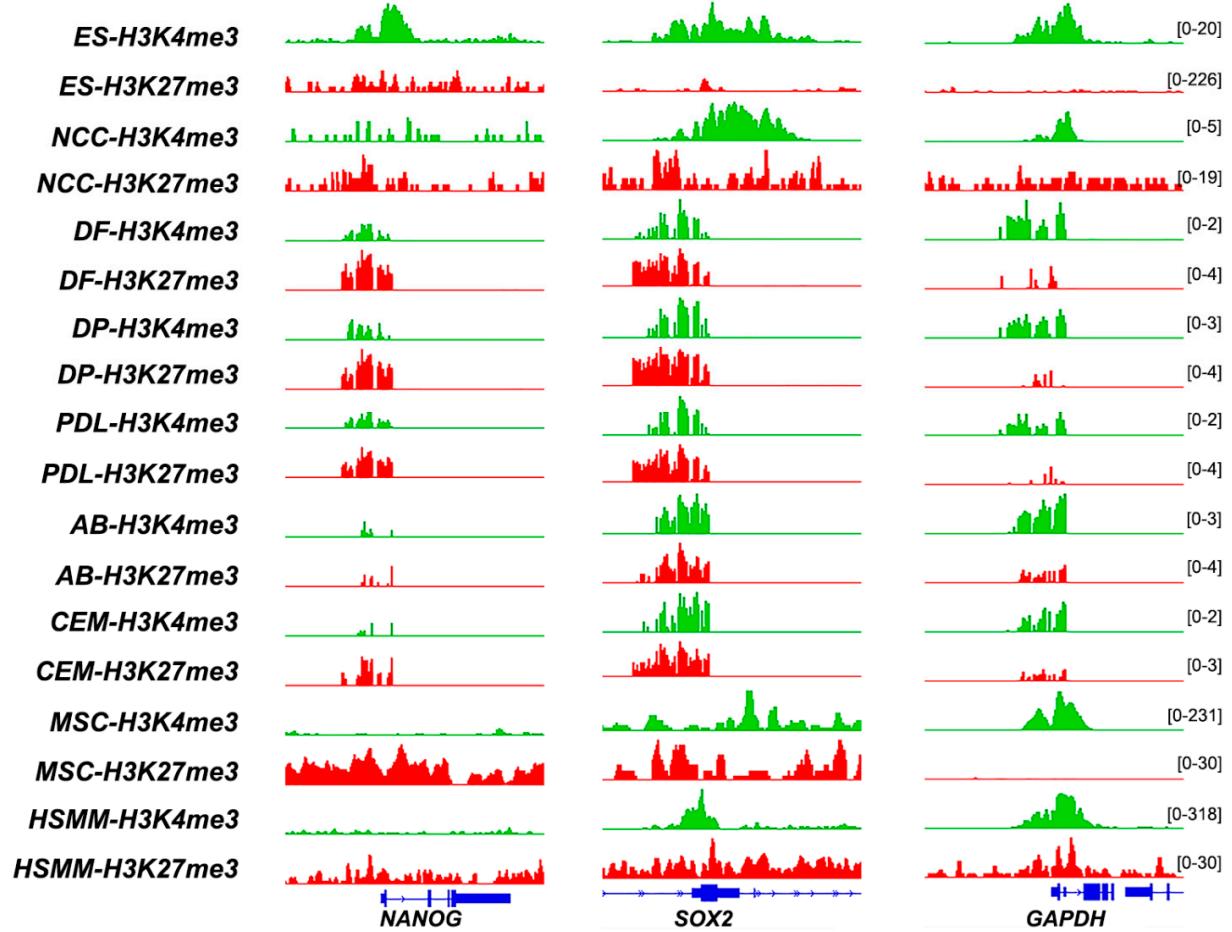
<b>Gene</b>	<b>Forward Primer</b>	<b>Reverse Primer</b>
mALP	AACAACCTGACTGACCCTTCG	AATCCTGCCTCCCTCCACC
mOCN	CAGGAGGGCAATAAGGTAGT	CGTAGATAGCGTTGTAGGC
mRUNX2	TTCTCCAACCCACGAATGCAC	CAGGTACGTGTGGTAGTGAGT
mOSX	TGATGGGACAGAGTGAGCTG	CTGTCCCCTCTCCTCAAG
mCDX4	CGAGAACGACTGGAGCGTGTA	TGTAGTCGGTCGAGCAGAAA
mACTIN	GCTACAGCTTACCCACCACA	TCTCCAGGGAGGAAGAGGAT
hEZH2	CGAGAGTGTGACCCTGACCTC	CACATCAGACGGTGCCAGC
hACTIN	TTGCTGACAGGATGCAGAAG	GTACTTGCCTCAGGAGGAG

**Primer pairs for ChIP PCR**

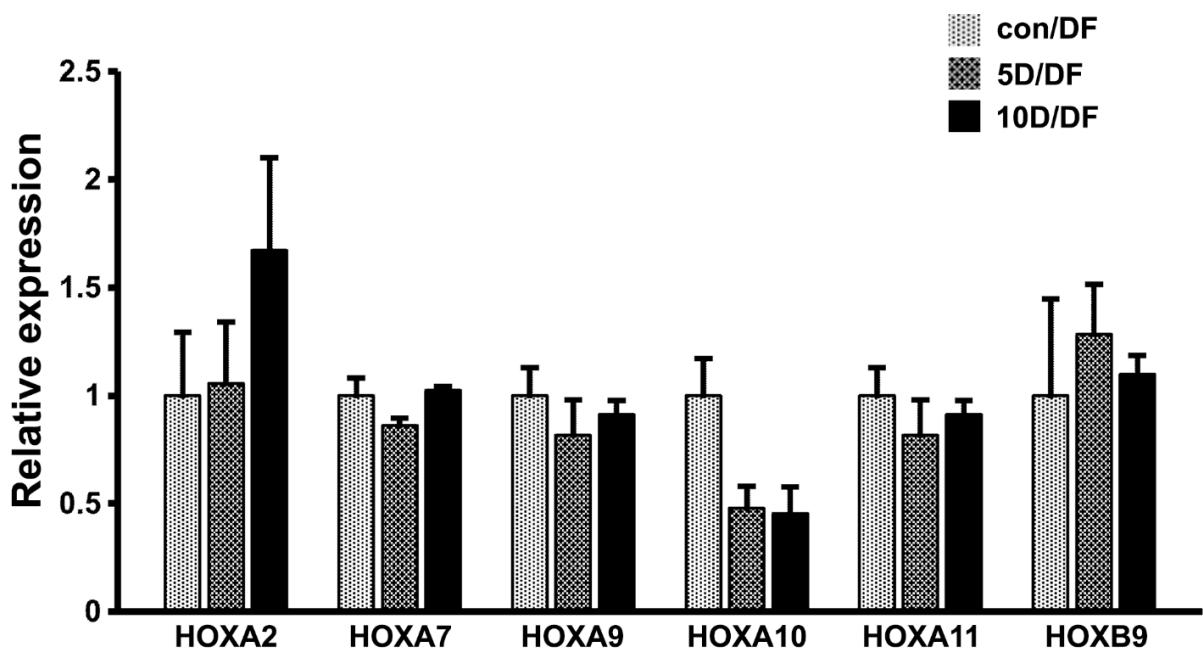
<b>Gene</b>	<b>Forward Primer</b>	<b>Reverse Primer</b>
hHOXA2 ChIP	TTACACTCGCGCACATTAC	GGATGTCCCAGTACGTG
hHOXA3 ChIP	GTAAAACCTGGCCCCAAAGG	TTATGACCCTTCCCCATCA
hHOXA4 ChIP	GTAAAACCTGGCCCCAAAGG	TTATGACCCTTCCCCATCA
hHOXA9 ChIP	TGATGGCGTGTGATTAATTGTGA	GGCCAACGACGATTAAAAGA
hHOXA10 ChIP	GCCCTATAAAAGCCCATTCT	TAAGAAATCGCTGCAAAACC
hHOXB2 ChIP	GAAGGGGATGAGGAAAAGGT	AAACACCAGAGGACCACGAC
hHOXB3 ChIP	CACCCCTTGACTTTGTCTCC	TCTGACTTCTCGGGGATT
hHOXB9 ChIP	GCACATTGCATCAGCATAAAA	GCCTGATAAAAGCGTCAGCTC
hHOXC11 ChIP	CTGAGCCACTAAGCCAAAGG	CATGCCTGCCTTATTGTCA
hHOXD9 ChIP	GTCTCCAGCGCGCACTAT	AGCCTCCTCTCGGGTCAC

m=mouse; h=human

## Figure S1



**Figure S2**



**Figure S3**

