



**Fig. S4** C2C12 cells were transfected with nonspecific siRNA (siNS) or HP1 $\alpha$ siRNA (siHP1 $\alpha$ ). 48 hours after transfection Chip assay was performed with anti-H3K9me3 (A) or anti-JHDM3A antibody (B). H3K9me3 levels (A) and presence of JHDM3A (B) at Lbx1 exon 2 were quantified by Real time PCR . \*P<0.01 for siNS transfected cells versus siHP1 $\alpha$  transfected cells.

**Fig. S4** Sdek et al