



(a) Effect of 5-aza-dC treatment on the *p15*, *gapdh* and *miR-10a* expression levels in MCF7 cells. Expression of *p15* was upregulated when after treatment with 5-aza-dC, but no changes were observed in the expression level of *miR-10a* and *gapdh* gene. (b) Quantitative RT-PCR analysis of *hoxd4* expression after 5-aza-dC treatment of MCF7 and MDA-MB-231 cells (c) 5-aza-dC reverses *miR-10a* inhibition of *hoxd4* gene expression in MCF7 and MDA-MB-231 cells (□: Mock; ■: *miR-10a*; □: Anti-*miR-10a*; ■: Mock + 5-aza-dC; □: *miR-10a* + 5-aza-dC; ■: Anti-*miR-10a* + 5-aza-dC). (d) Western blot analysis of H3K9me2 and H3K27me3 in the *hoxd4* promoter. (e) ChIP analysis of H3K27me3 and H3K9me2 levels in two regions (box1 and box2) of the *hoxd4* promoter (□: Cont; ■: *miR-10a*). (f) Bisulphate sequencing analysis of the *hoxd4* promoter methylation status in MCF7 and MDA-MB-231 cells.†