



Supplemental Figure S7. Chromatin marks on reporters integrated in paradoxical domains. Measures of the DpnII assay (see supplemental methods) were available for 60 barcodes inserted in paradoxical chromatin, 49 of which are in Red chromatin and 11 in Blue chromatin. The box plots show the measure of protein binding by DpnII assay on the barcodes inserted in paradoxical domains versus barcodes inserted in Red regions (247 in total). The median expression of the 60 barcodes inserted in paradoxical chromatin -0.88 and the median expression of barcodes with matched HP1, Pc and H1 signal in DpnII assay are 1.01 (Wilcoxon test $P < 10^{-6}$), 0.60 (Wilcoxon test $P < 10^{-5}$) and 0.84 (Wilcoxon test $P < 10^{-4}$), respectively. This indicates that barcodes with similar chromatin marks are expressed at higher level. Here, matched barcodes are those for which the DpnII signal is juxtaposed to the values for barcodes in paradoxical chromatin.