



**Supplemental Figure S5. Integrated reporters acquire the epigenetic features of the endogenous locus.** Binding of the chromatin markers expressed as fold changes over Dam construct for promoter II (**a**) and for the promoterless construct (**b**). Bars height represent the log<sub>2</sub> of the protein/Dam binding ratios, where each binding ratio is the number of barcode counts with DpnII digestion divided by the number of barcode counts without DpnII digestion (see supplemental methods). The color of the bars refers to the chromatin type in which reporters are inserted. The y-axis shows the observed enrichment of the protein relative to Dam only construct. As seen in panels **a** and **b** Brahma preferentially binds to reporters inserted in RED chromatin, HP1 binds to reporters in GREEN chromatin, Polycomb binds to reporters in BLUE chromatin and H1 binds to reporters in BLACK chromatin. Thus reporters adopt the features of the surrounding chromatin. (**c**) The violin plots show the binding score of the Dam only construct at the different chromatin colors. The bias is small and does not account for for the effect seen in panels **a** and **b**.