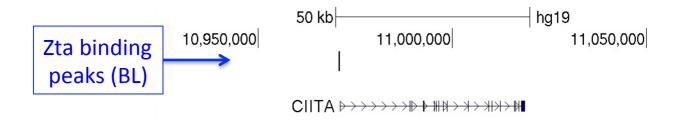


Supp Figure 1. CIITA downstream targets.

The expression of targets of CIITA were investigated by RNA seq as described in Ramasubramanyan et al 2015).

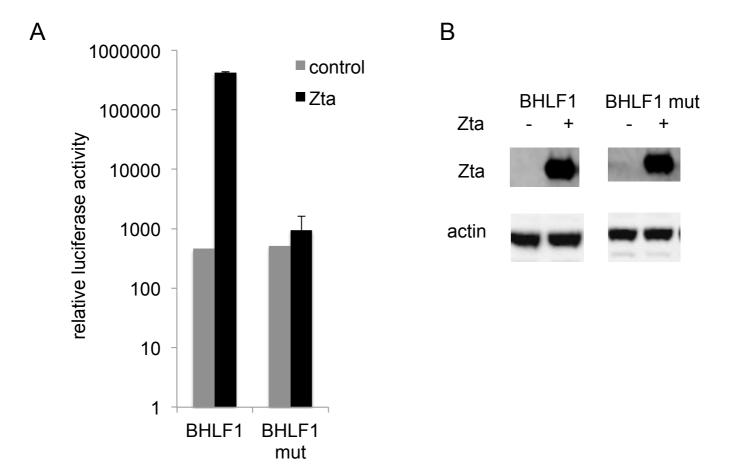
The relative change in expression following Zta expression in Akata BL cells was determined and presented (FDR<0.05).

The red line indicates the maximum reduction expected as only 70% of cells express Zta.



## Supp figure 2. Interaction of Zta with the CIITA pomoter in BL cells.

The interaction of Zta with the CIITA locus was undertaken by ChIP-seq (as described in Ramasubramanyan et al 2015). The locus is shown chr16:10,923,269-11,066,626. A peak of binding is seen as a bar spanning the TSS of the gene in Akata BL cells undergoing lytic replication cycle.



Supp Figure 3. Activation of BHLF1 promoter depends on ZREs in BL cells.

The viral *BHLF1* promoter-luciferase plasmid and a version that has a mutation of each ZRE within the promoter was introduced into BL cells by electorporation together with a his-Zta expression vector or control plasmid. 48 hours later cells were harvested and the luciferase activity and protein concentrations determined.

- A. Relative activity of promoters (log10 scale).
- B. Western blot showing his-Zta and actin expression.