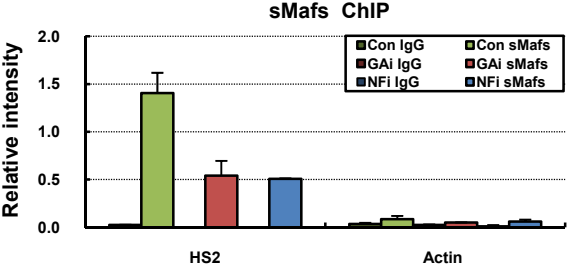
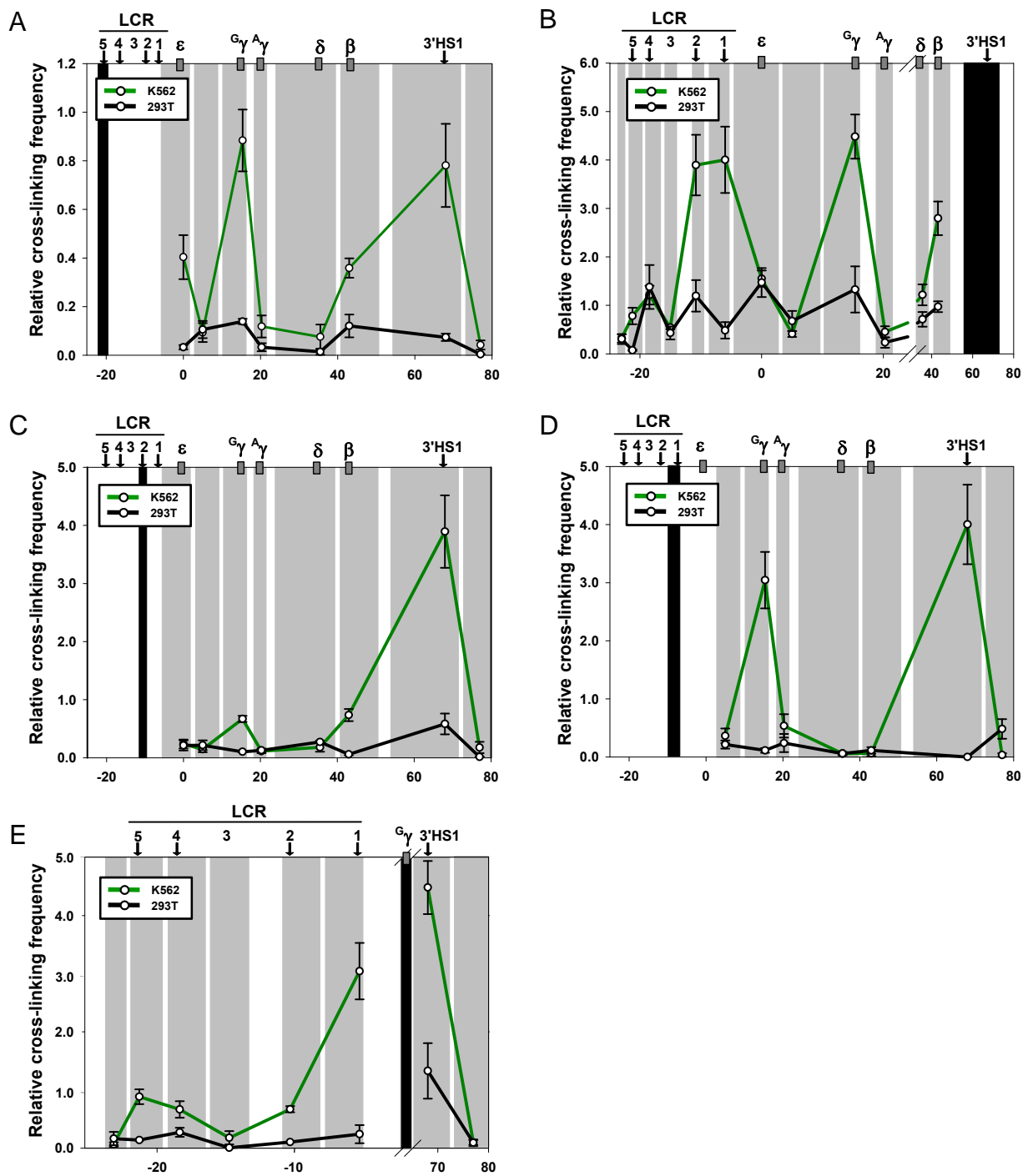


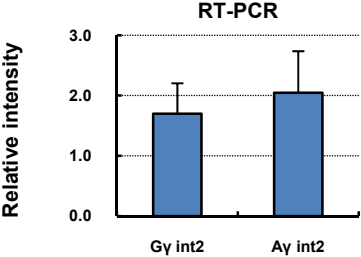
Supplementary fig. 1.



Supplementary fig. 2.



Supplementary fig. 3.



Supplementary Figure legends

Supplementary Figure 1. sMafs binding at the β -globin LCR HS2 in GATA-1 or p45/NF-E2 knockdown K562 cells. CHIP was performed with sMafs antibodies (Santa Cruz Biotechnology, sc-22831x) in K562 cells expressing GATA-1 or p45/NF-E2 shRNA. Relative intensity was determined by quantitatively comparing immunoprecipitated DNA with input for the HS2 amplicons. Actin served as negative control. Normal rabbit IgG served as experimental control. The results of two independent experiments \pm SEM are graphed.

Supplementary Figure 2. Relative proximity between HSs and the γ -globin gene in the β -globin locus in K562 and 293T. The 3C assay was performed with Hind III restriction enzyme. The black shading represents the anchor fragment for HS5 (A), 3'HS1 (B), HS2 (C), HS1 (D) and $^G\gamma$ -globin gene (E) in PCR. The gray shadings are fragments generated by Hind III digestion. Relative cross-linking frequency was determined by quantitatively comparing ligated DNA in cross-linked chromatin with control DNA and then normalizing to the cross-linking frequency at the ERCC3 gene. The results are averages of four to six independent experiments \pm SEM. Hind III sites and PCR primers in the β -globin locus were represented by vertical bars and horizontal arrows Figure 1, respectively.

Supplementary Figure 3. Transcription of the $^G\gamma$ - and $^A\gamma$ -globin genes in K562 cells. cDNA was prepared using RNA isolated from K562 cells and then amplified in intron 2 of $^G\gamma$ - and $^A\gamma$ -globin genes by real-time PCR with SYBR green as fluorescence dye. Transcript levels of the intron were compared to transcript levels of the Actin control gene. The results of four independent experiments \pm SEM are graphed. Sequences used primers are 5'-TTGAAAGTCAGCTCTGTGTGTGT-3' and 5'-CCCTGTATGCTGTAGGCTGAA-3' for the $^G\gamma$ -globin gene and 5'-TTGAAAGTCAGCTCTGTGTGTGT-3' and 5'-GGCTGAAGACGTTAAAAGAAACA-3' for the $^A\gamma$ -globin gene.