



### Additional data 2. Collision frequencies at the human $\beta$ -globin locus.

Collision frequencies at the human  $\beta$ -globin locus (a gene-rich region on chromosome 11p15.4) were obtained from several published 5C experiments performed in GM06990 cells, an EBV-transformed lymphoblastoid cell line where this locus is not expressed and where only a very weak/residual interaction was detected (supplemental tables 6&7 of ref. [13]). Data from each experiment were normalized according to a previously published algorithm [19] and plotted into a single graph. Statistical analyses were performed as explained in the legend of Fig.1B.