

S1 Fig: Schematic of 4C library preparation. Drosophila Kc cells were cross-linked with formaldehyde, lysed, and digested using a restriction enzyme recognizing 4 bp. The protein-DNA complexes were diluted so that the sticky DNA ends were ligated in conditions that favor intramolecular ligations. Cross-links were reversed and DNA was isolated. Because multiple DNA fragments could be ligated into large circles, a second digestion was done with another restriction enzyme recognizing 4 bp. Ligation was again performed under dilute conditions to favor intramolecular ligations. Resulting circles were subjected to inverse PCR using primers based on DNA sequences in viewpoints of interest, to co-amplify unknown sequences from interaction partners. Our primers included Ion Torrent A and P1 adapters and barcode sequences. Amplified 4C libraries were size selected and used for high-throughput sequencing.