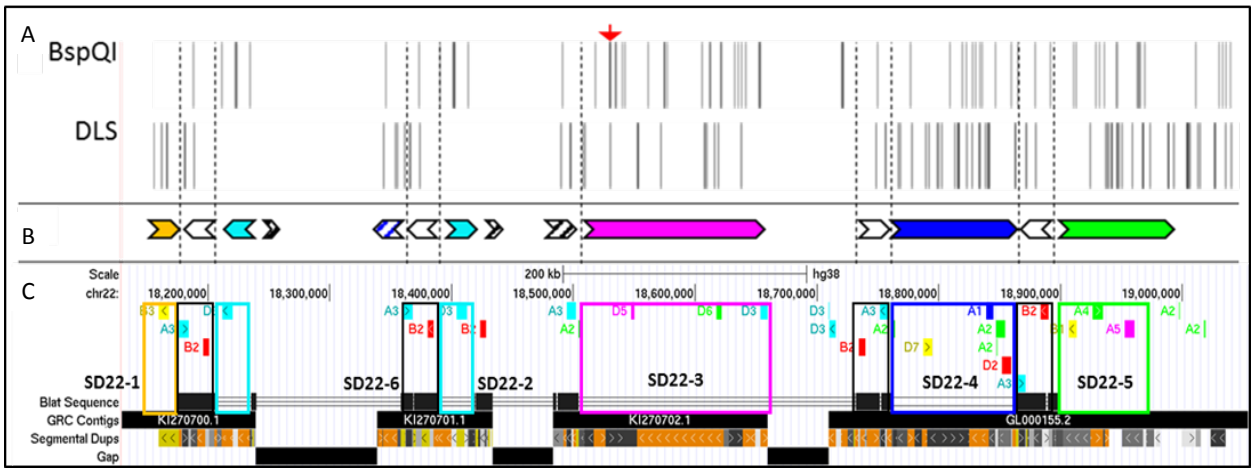

Fig. S11.

In silico Bionano optical map of LCR22A in hg38. A) BspQI and DLS rows depict the hg38 reference locus labeled *in silico* with the respective optical map enzymes. The red arrow represents a 'fragile' site prone to double strand breaks due to very close BspQI restriction sites on both strands. B) Duplicon decomposition of the hg38 structure of LCR22A. Duplicons were deduced from mapped haplotypes. Filled, colored arrows represent copies of duplicons and hatched arrows represent partial copies of duplicons of the same color. C) UCSC browser hg38 reference assembly tracks of Segmental Dups[2,24], GRC contigs, gap positions, and fiber FISH probe BLAT positions.