

Figure 3. We Identify Thousands of Chromatin Loops Genome-wide Using a Local Background Model

(A) We identify peaks by detecting pixels that are enriched with respect to four local neighborhoods (blowout): horizontal (blue), vertical (green), lower-left (yellow), and donut (black). These "peak" pixels indicate the presence of a loop and are marked with blue circles (radius = 20 kb) in the lower-left of each heatmap. The number of raw contacts at each peak is indicated. Left: primary GM12878 map; Right: replicate; annotations are completely independent. All contact matrices in this and subsequent figures are 10 kb resolution unless noted.

(B) Overlap in peak annotations between replicates.

(C) Top: location of 3D-FISH probes used to verify a peak in the chromosome 17 contact map. Bottom: example cell.

(legend continued on next page)