Supplementary Figure 1: CPD hotspots occur almost equally in genic and intergenic regions. CPD hotspot association with genomic regions was determined based on NCBIv36/hg18 RefSeq genome annotation.

Supplementary Figure 2: Approximately 20% of CPD hotspots are associated with more than one repeat element. Representative association of a CPD hotspot (green bars) associated with multiple repeat elements on chromosome 6. Hotspots were visualized using CisGenome software. Gaps indicate masked repeat regions which are not covered by probes.

Supplementary Figure 3: CPD hotspots are associated with repeat elements in both genic and intergenic regions approximately equally on both chromosomes. CPD hotspot association with genomic regions was determined based on NCBIv36/hg18 RefSeq genome annotation.

Supplementary Figure 4: CPD hotspots were confirmed using qPCR to amplify identified hotspots from chromosome A) 1 and B) 6 as well as a region with no identified hotspot on chromosome 1 (C). Orange bars indicate the regions amplified.

Supplementary Figure 5: Frequency of CPD Hotspots and random regions Compared to Alu Elements. (A) Chromosome 1 and (B) chromosome 6.

Supplementary Figure 6: CPD hotspots formed equally on the polydT and nonpolydT side of polydT Alu repeats. (A) Chromosome 1 and (B) chromosome 6. The apparent reduction in hotspot formation represented in the shaded regions corresponds to approximately one probe length (25 bp) from the edge of a masked repeat and is likely an artifact of the microarrays.
Supplementary Fig. 2

The graph shows the IP/Input (log2) distribution across a range of kb positions. The x-axis represents kb positions from 39800 to 39804, and the y-axis represents IP/Input (log2) values ranging from -3 to 3.

The graph includes four lines differentiated by color:

- Red line: cpdIP 0 J/m²
- Green line: cpdIP 12 J/m²
- Blue line: Alu
- Orange line: LINE
Supplementary Fig. 3

![Graph showing percent CPD peak association for various genic and intergenic regions on Chr 1 and Chr 6. The graph compares repeat and non-repeat segments.](image-url)
Supplementary Fig. 4

A

![](chart1.png)

Chr 1

B

![](chart2.png)

C

![](chart3.png)
Supplementary Fig. 5

A

Frequency
(# per Mbase/Total count)

Mbase

B

Frequency
(# per Mbase/Total count)

Mbase