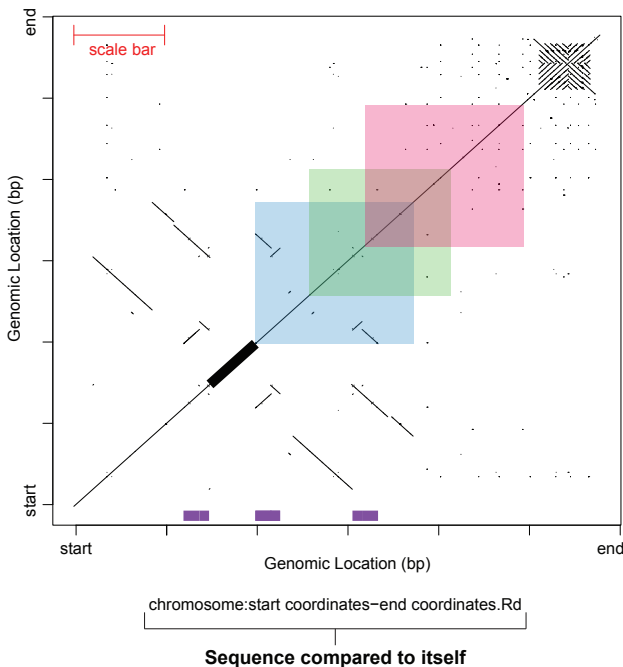


Genomic architecture of mapped inversions

Key:

Inversions shown on plot
 Dotplot of **mBM.4.2, fCB.4.2** on chr4
 (Dataset.chrNo.invNo) (chromosome)



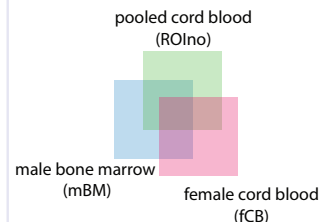
Datasets included:

- Newborn female invertome female cord blood (fCB)
- Adult male invertome male bone marrow (mBM)
- Population polymorphisms pooled cord blood (ROIno)

Genomic Features:

- Repetitive elements
- Non-palindromic repeats
- Palindromic repeats
- Reference assembly gaps
- Database of Genomic Variants (DGV) inversions

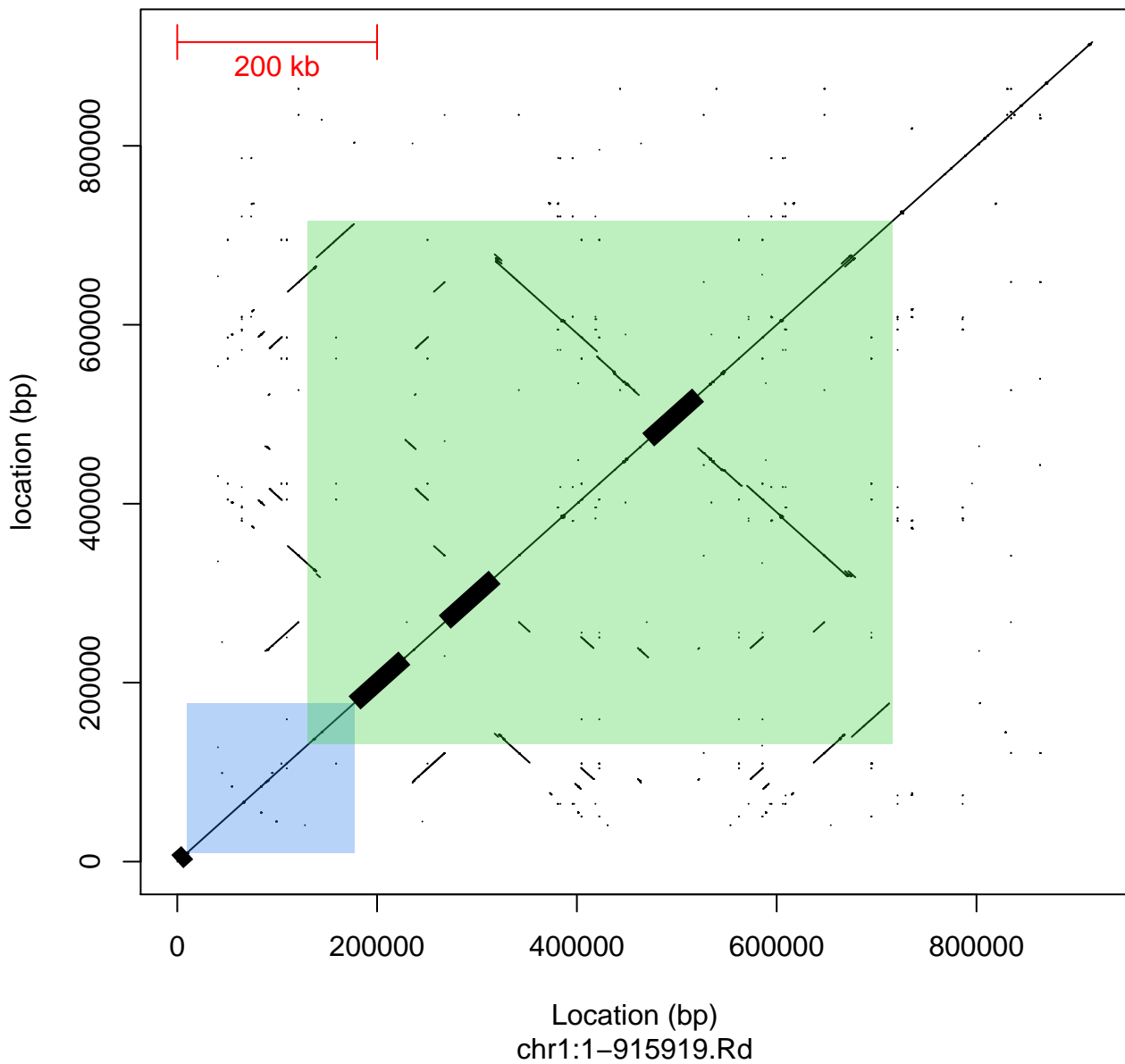
Colour Key of Overlaps:



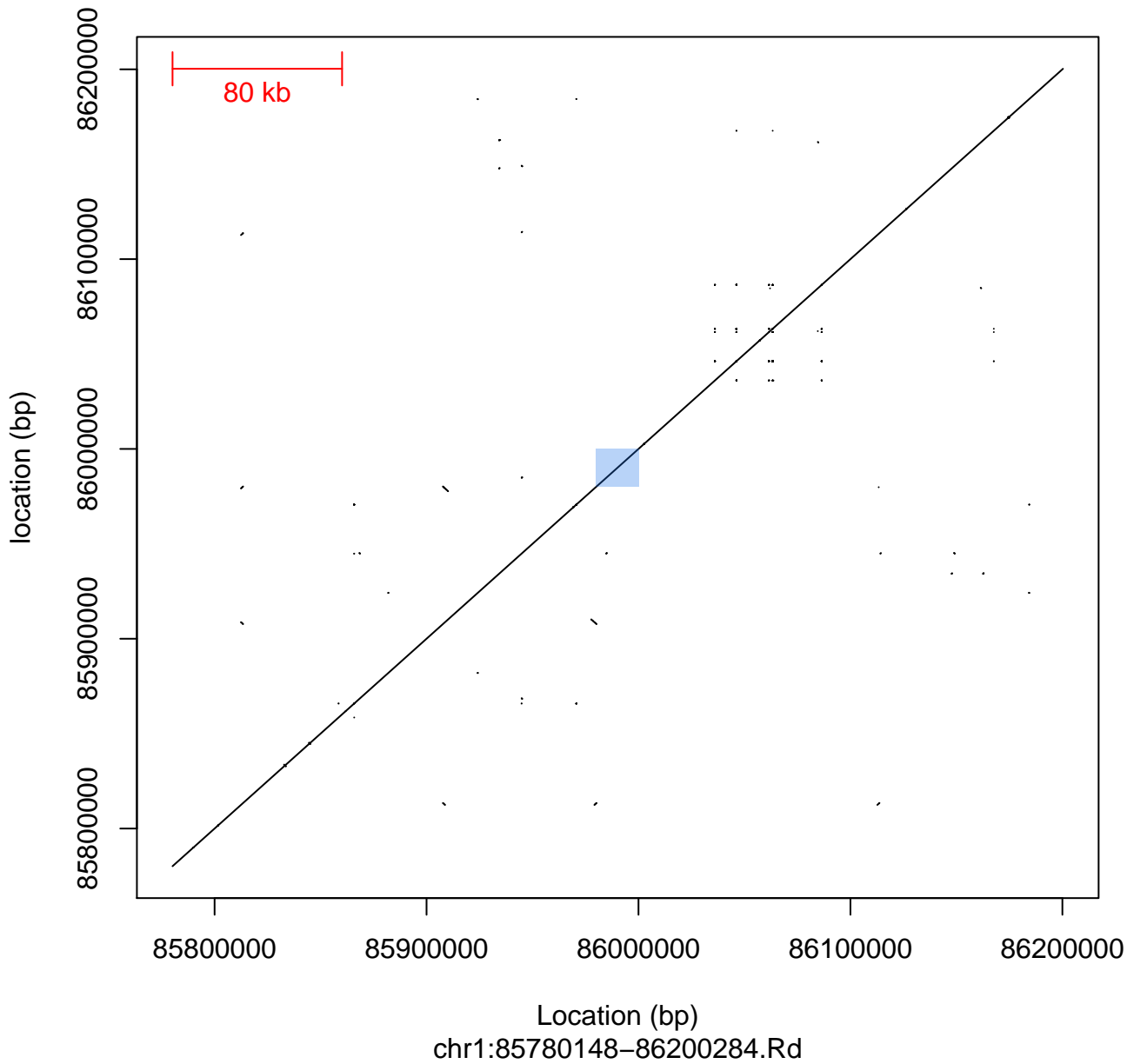
Supplemental Data File S2: Genomic architecture of mapped inversions

To visualize the genomic architecture of inversions a self-alignment was performed for all unique (137) genomic regions found to contain inversions in all datasets (see Methods). The mapped inversions are depicted for each region for the adult male inversion profile (mBM; blue), newborn female inversion profile (fCB; pink) and pooled donor population (ROIno; green). See Supplemental Tables 3-5 for inversion coordinates. The dot plots reveal the presence and location of many genomic features, including highly repetitive elements, palindromic and non-palindromic segmental duplications (as denoted in the key). Inversions listed in the Database of Genomic Variants (DGV) are plotted on both the x-axis and y-axis (purple). Reference assembly gaps are shown on the horizontal axis (black bars). Scale bars are shown in top left corners of individual plots (red).

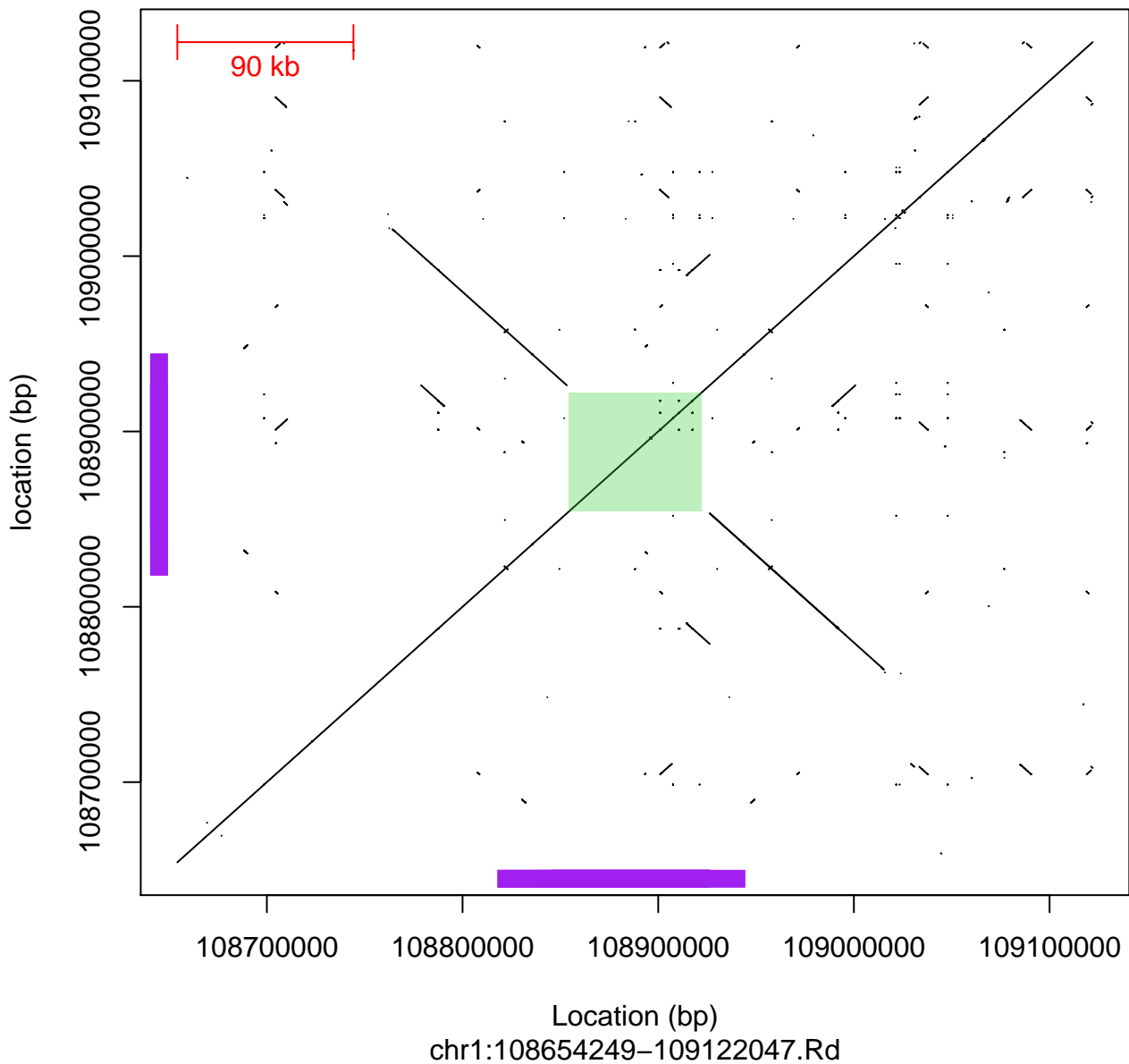
Dotplot of mBM.1.1, ROIno.1.1 on chr1



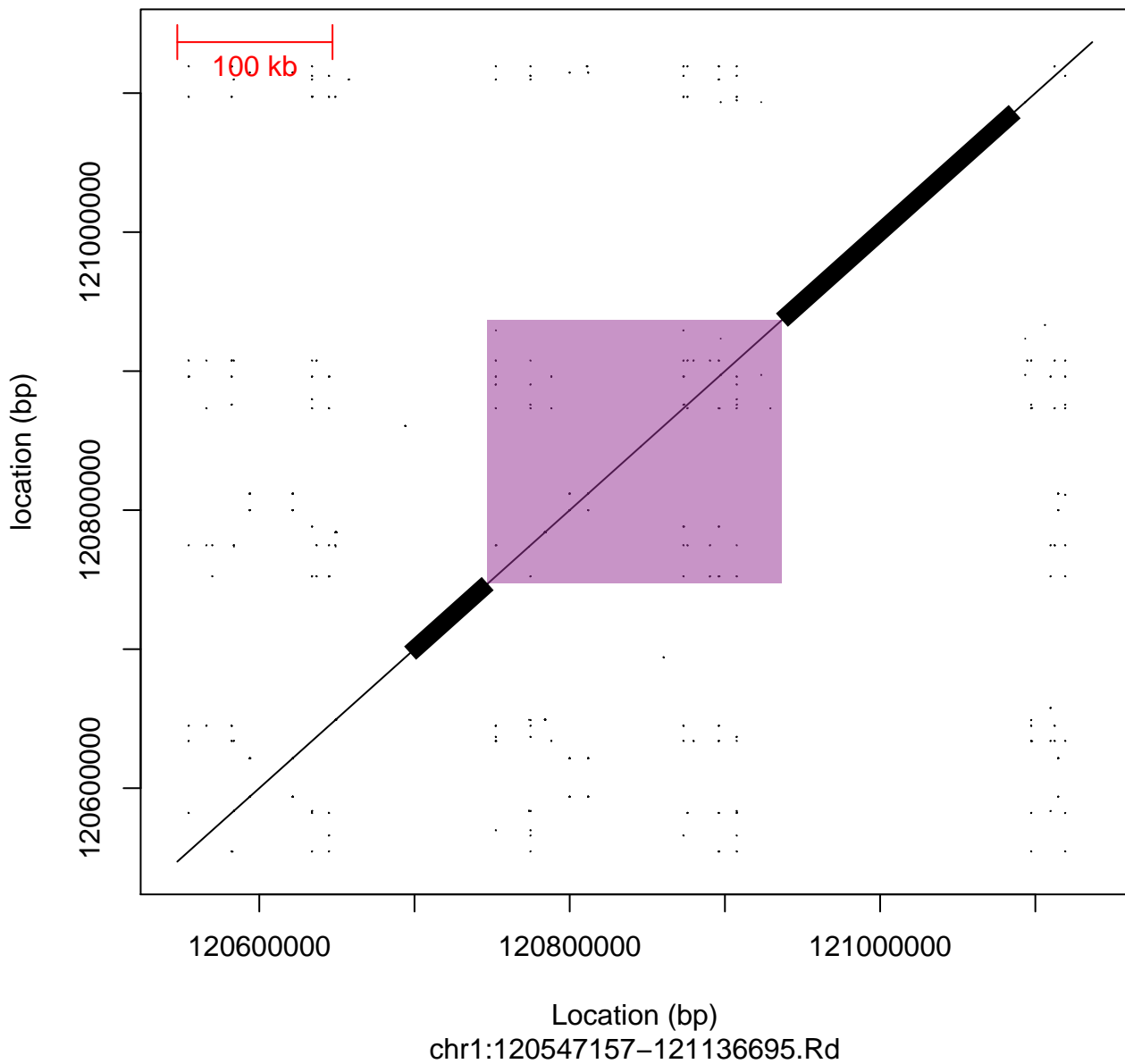
Dotplot of mBM.1.2 on chr1



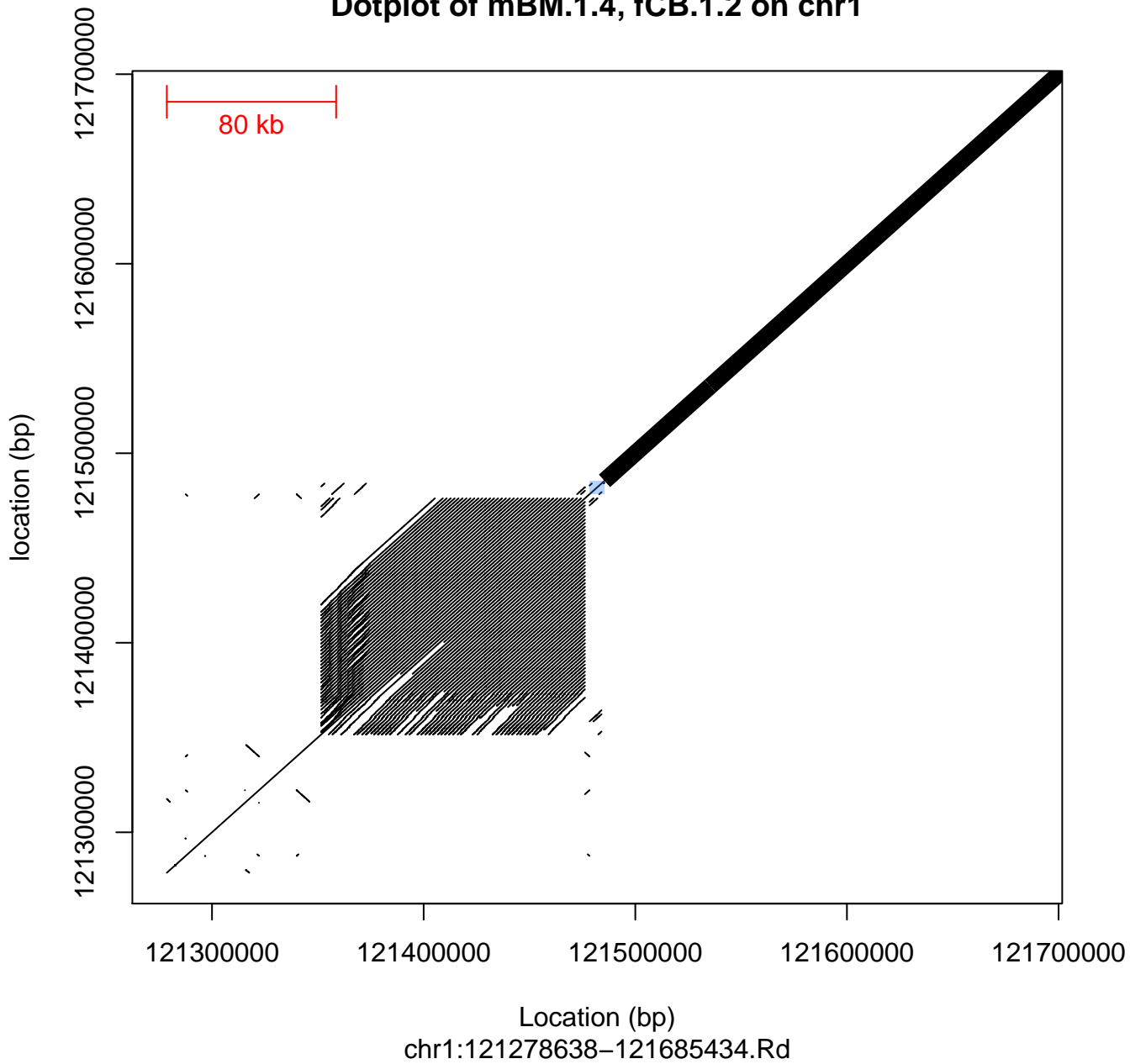
Dotplot of ROIno.1.5 on chr1



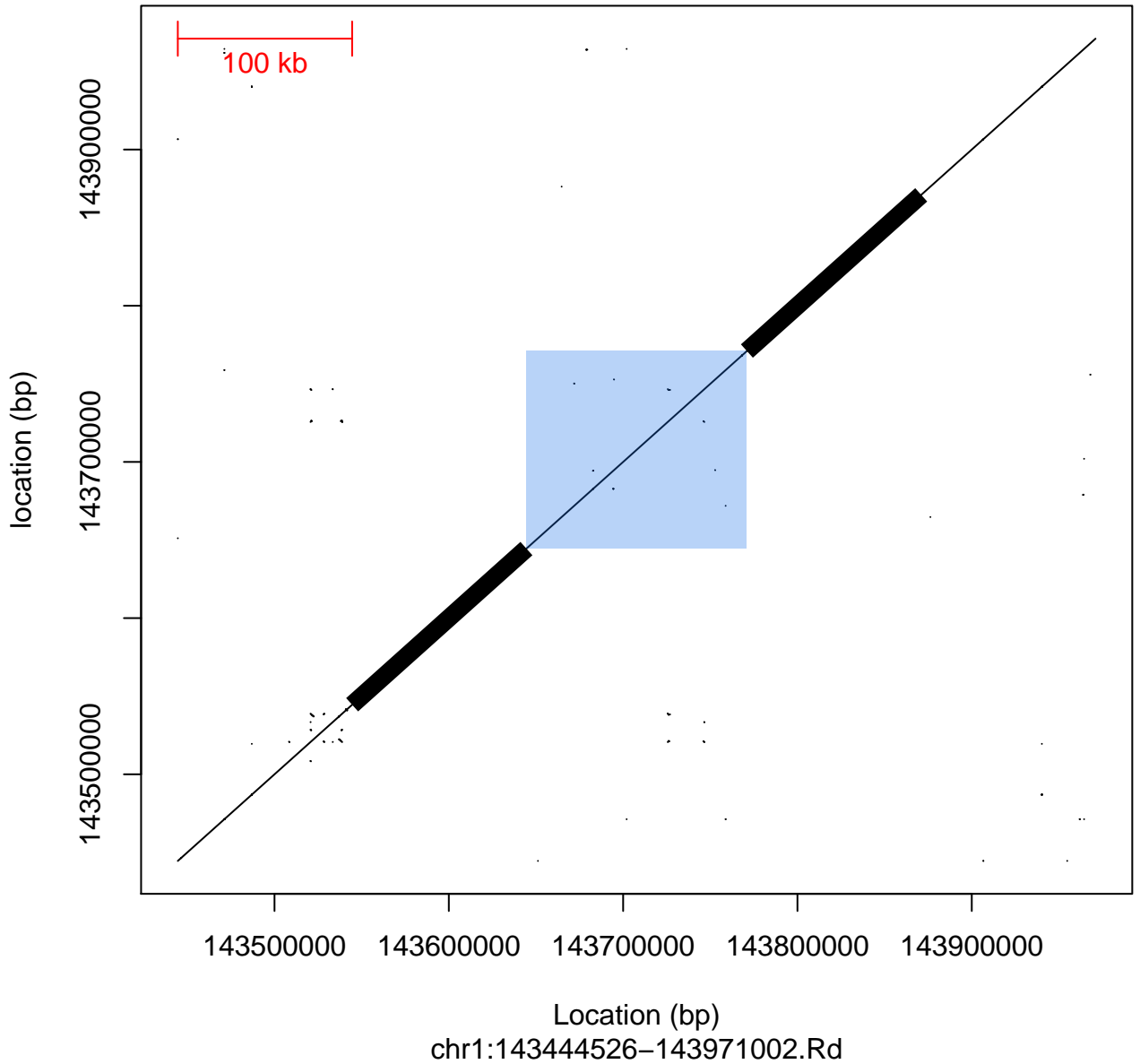
Dotplot of mBM.1.3, fCB.1.1 on chr1



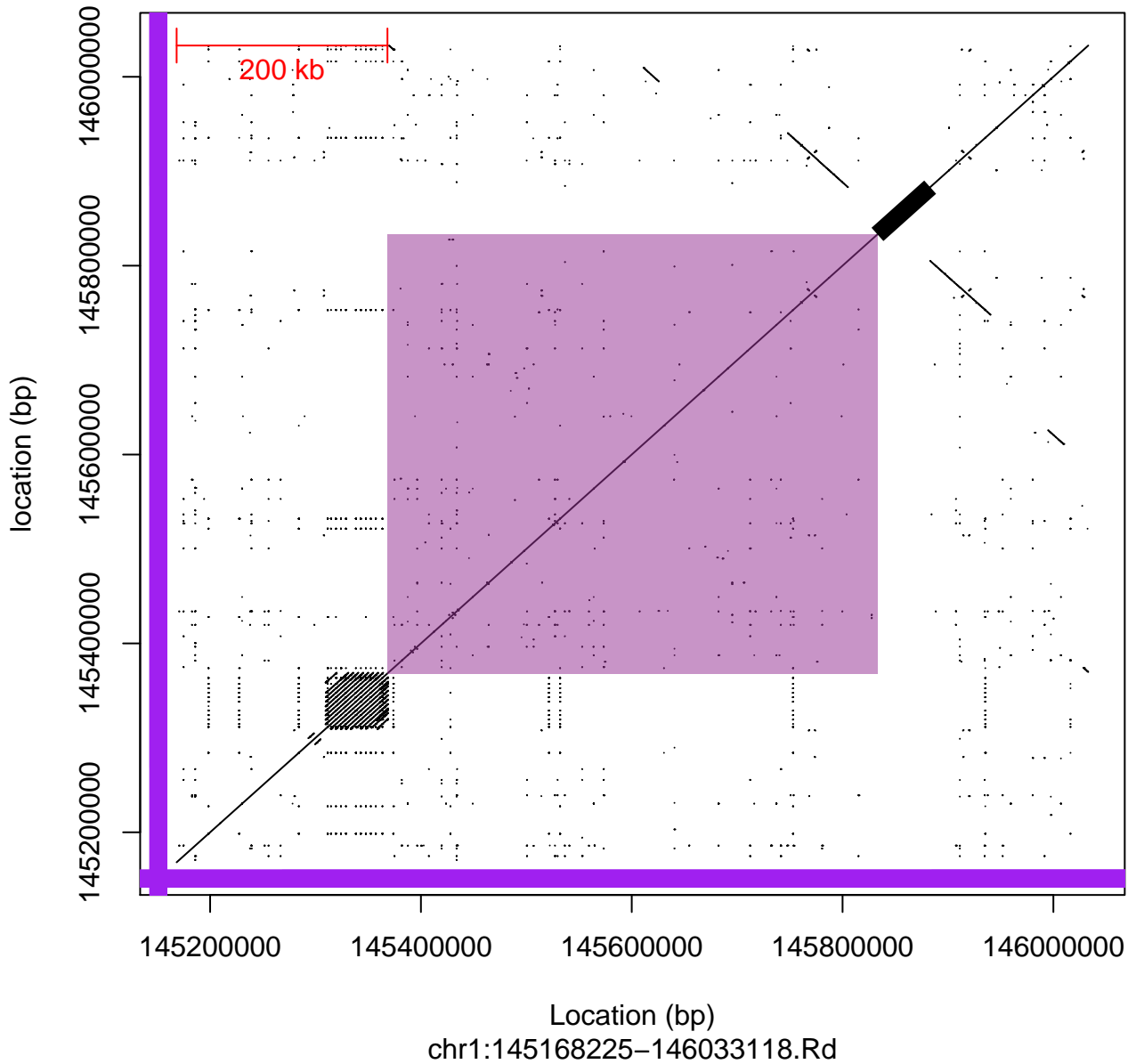
Dotplot of mBM.1.4, fCB.1.2 on chr1



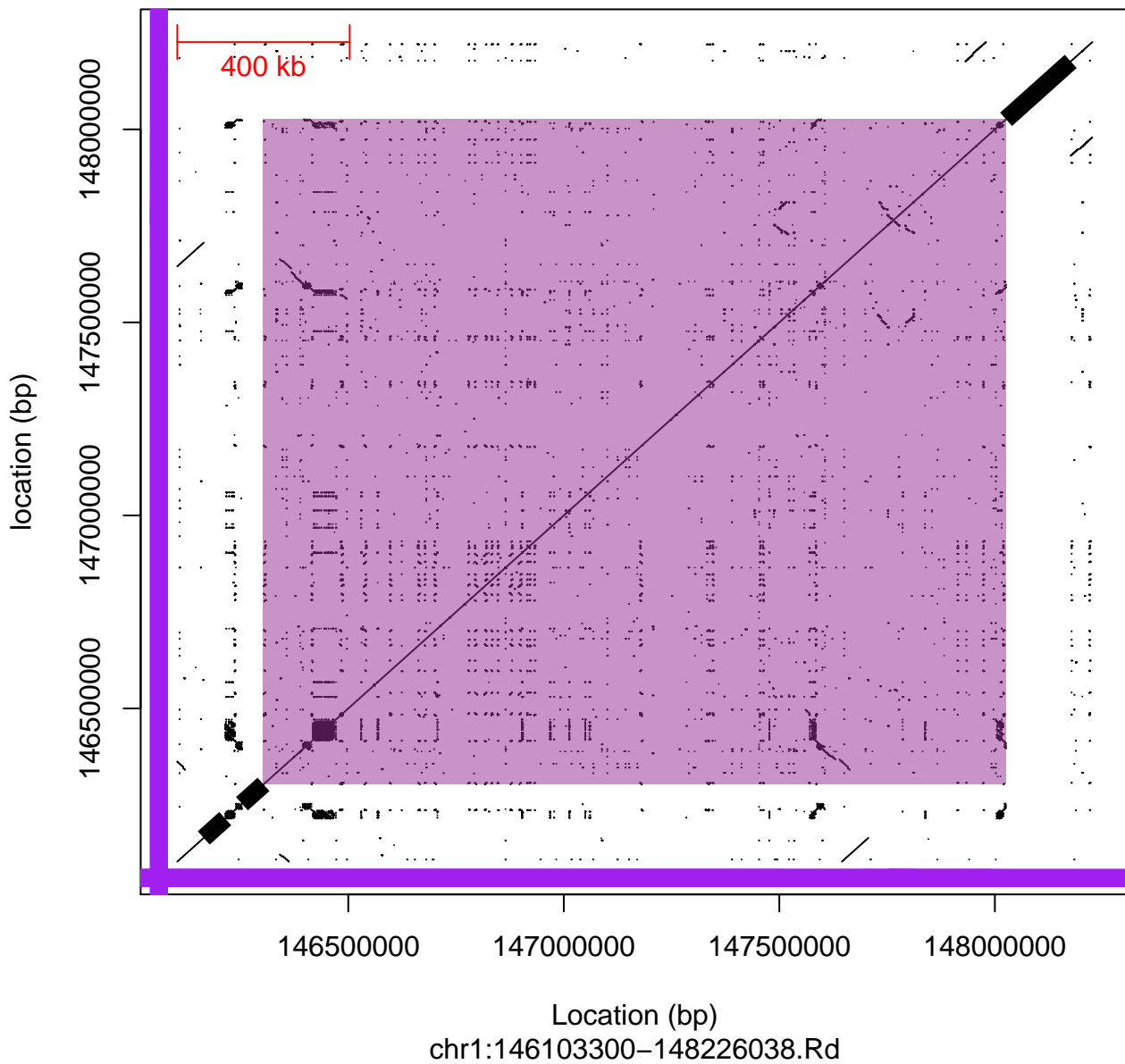
Dotplot of mBM.1.5 on chr1



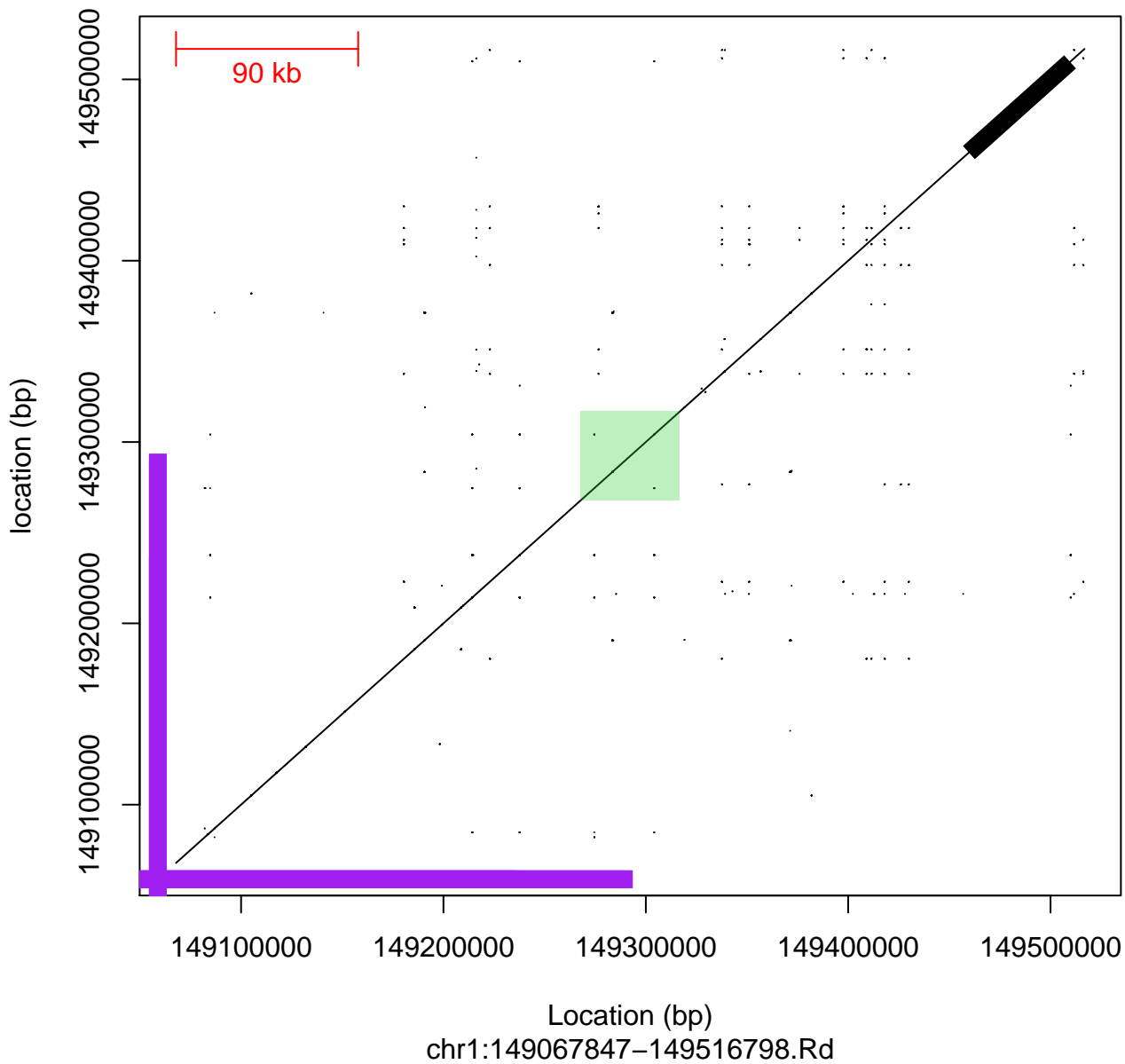
Dotplot of mBM.1.6, fCB.1.3 on chr1



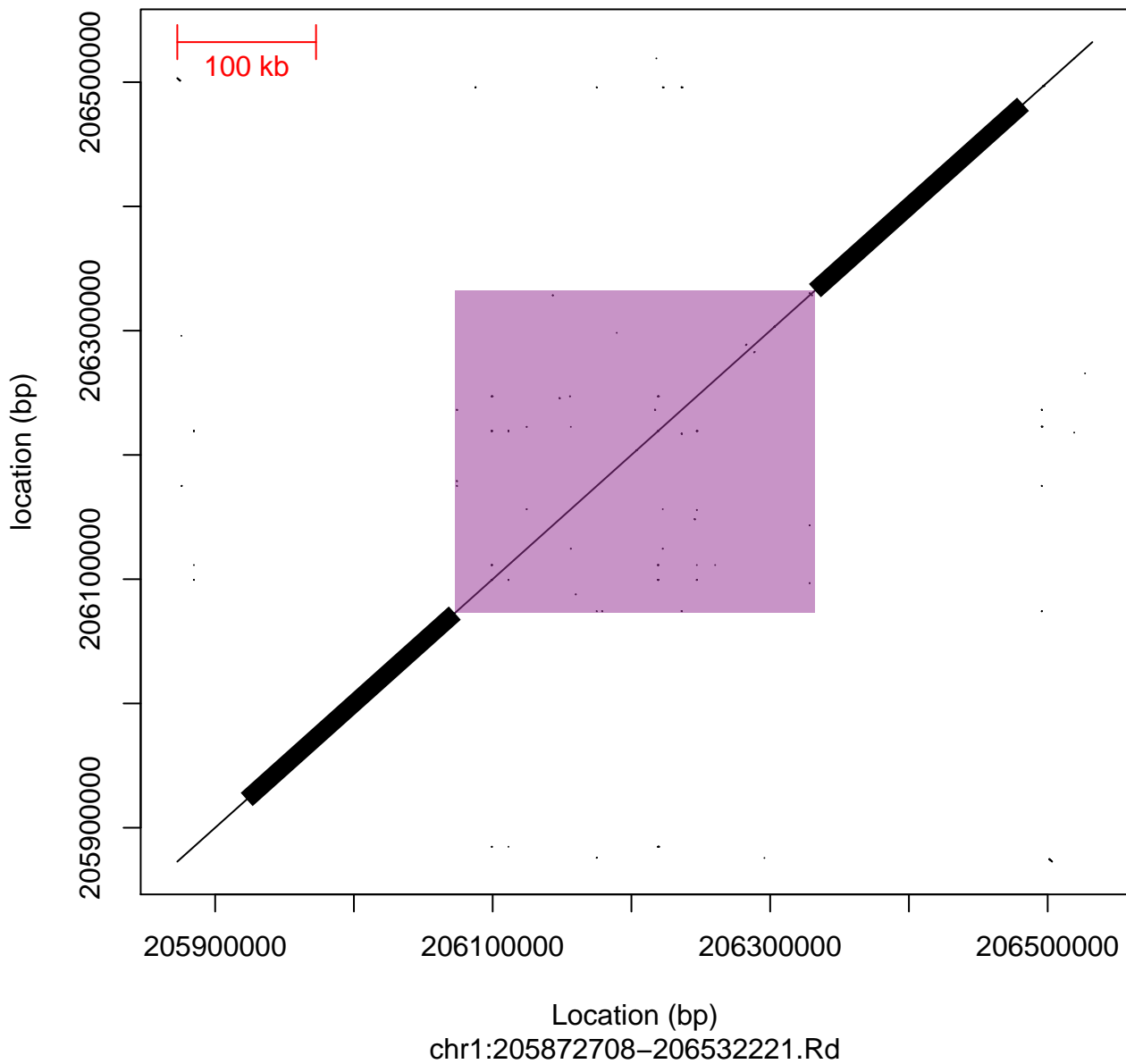
Dotplot of mBM.1.7, fCB.1.4 on chr1



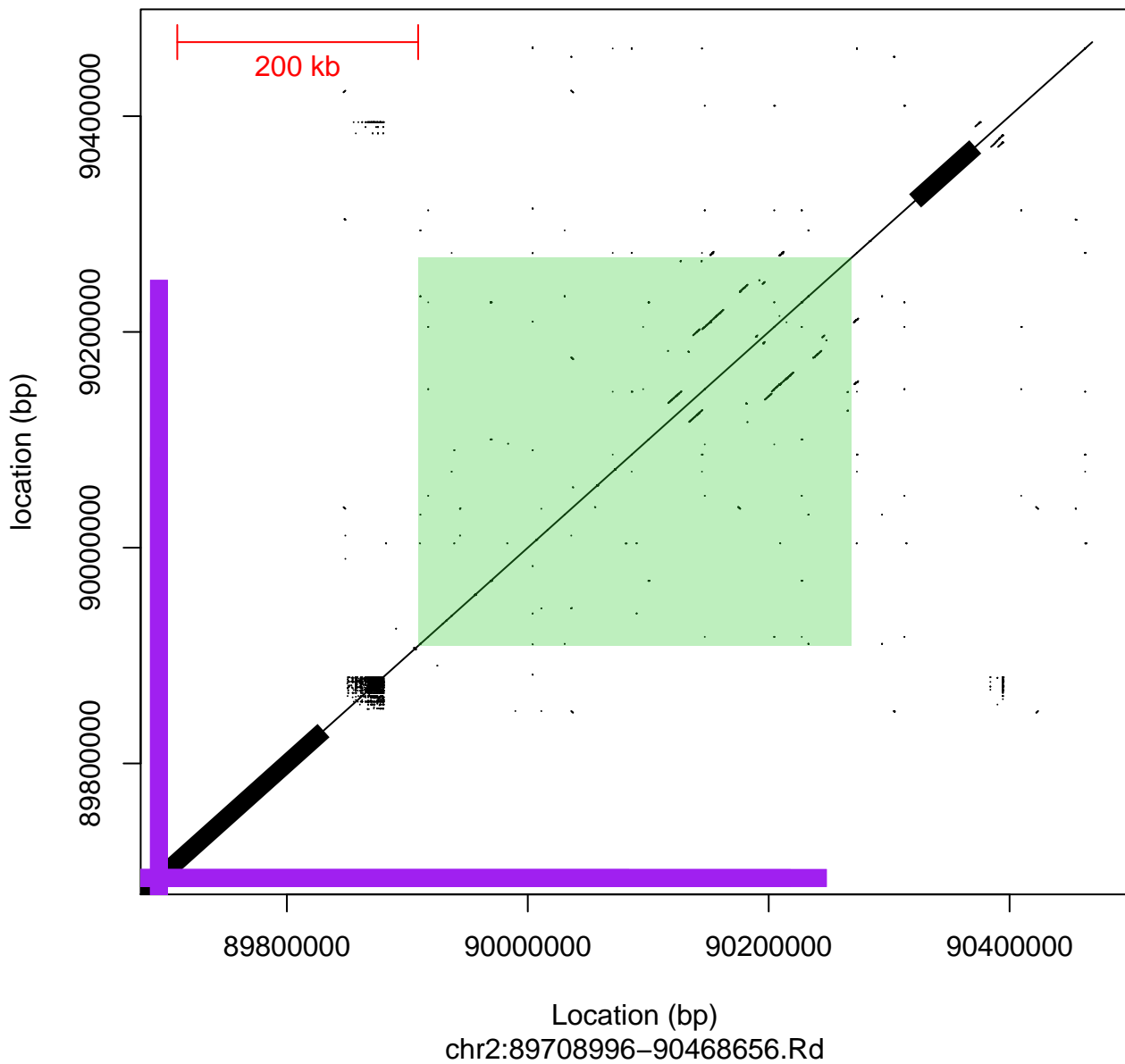
Dotplot of ROIno.1.15 on chr1



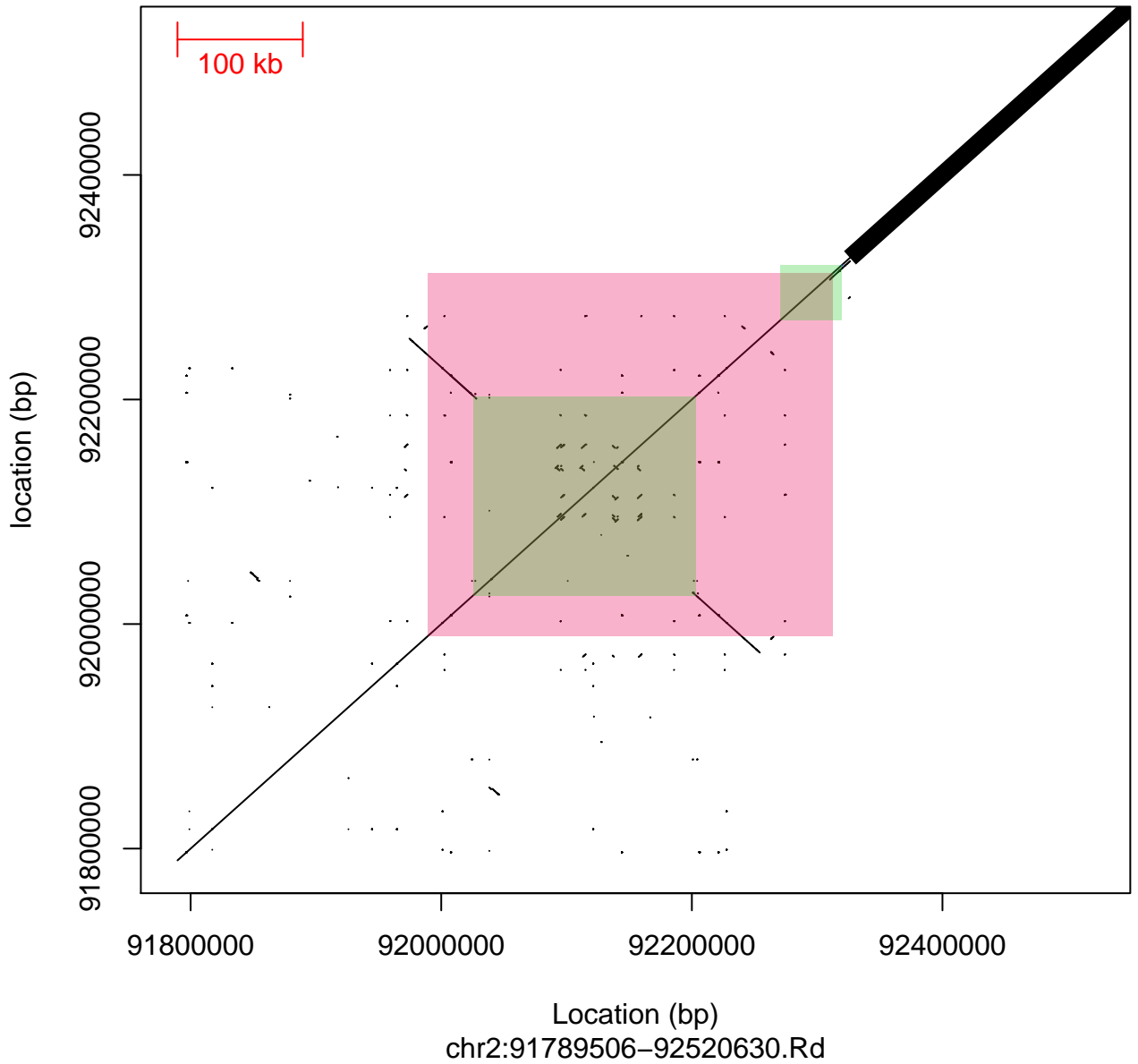
Dotplot of mBM.1.8, fCB.1.5 on chr1



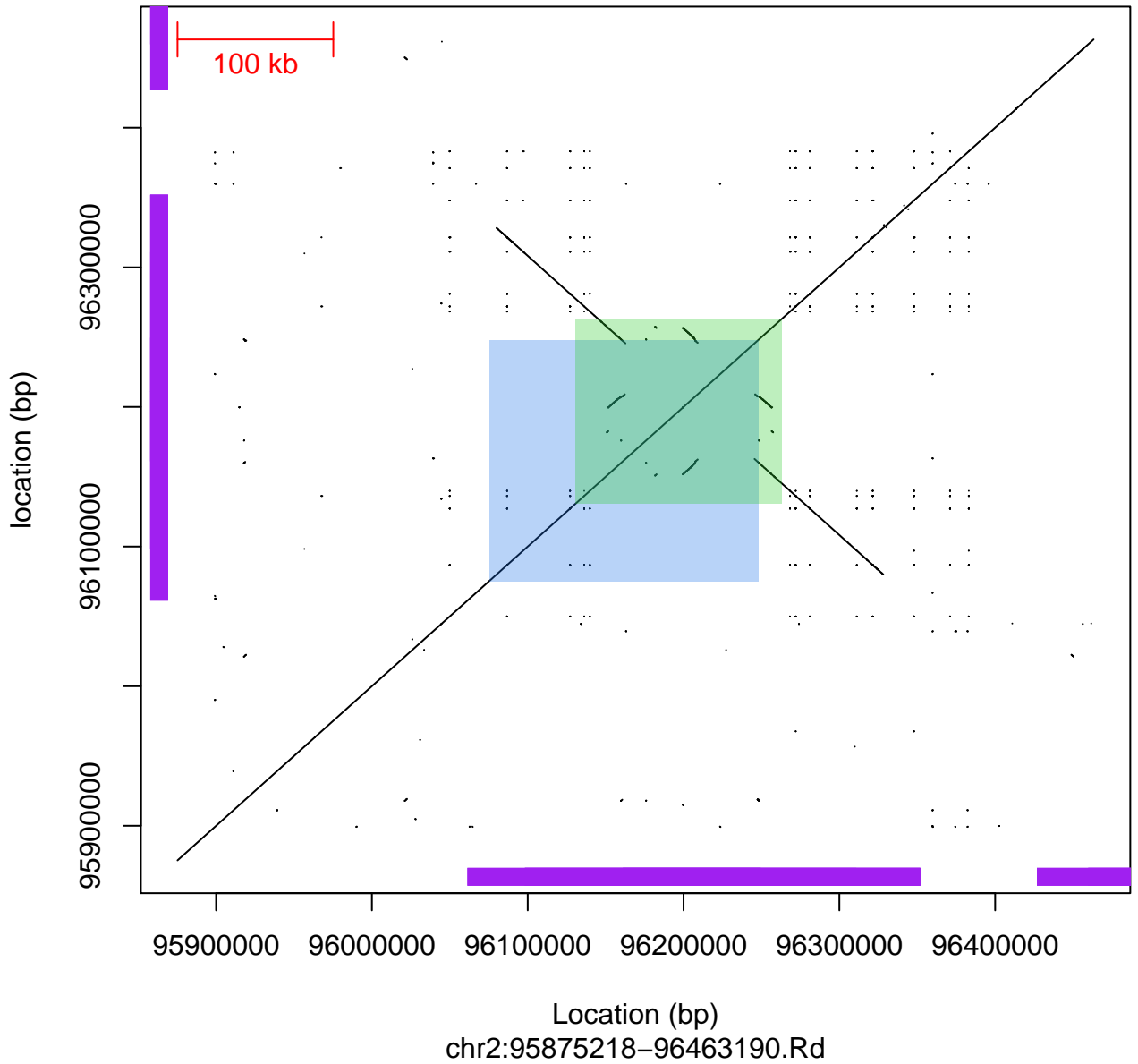
Dotplot of ROIno.2.3 on chr2



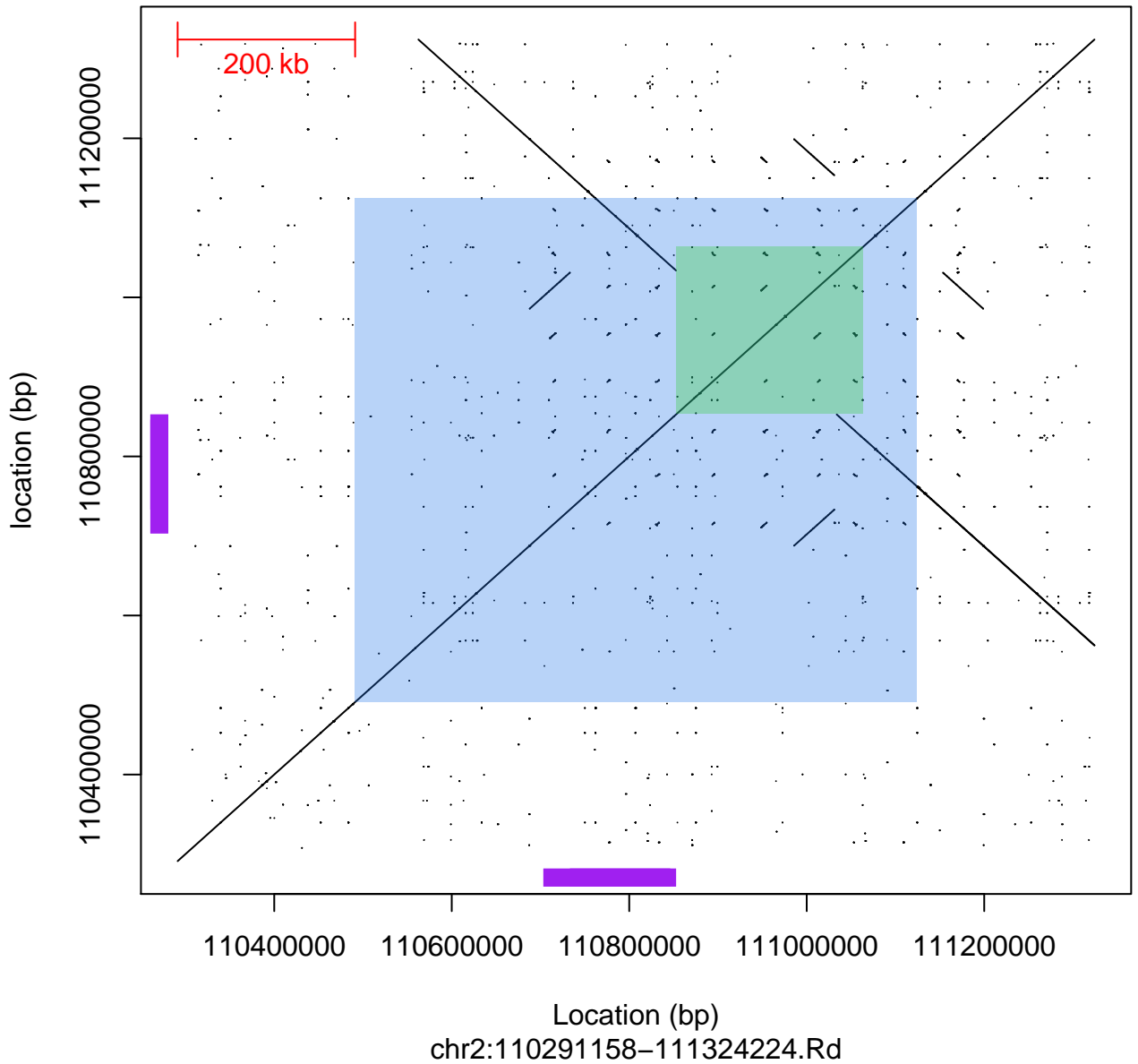
Dotplot of mBM.2.1, fCB.2.1, ROIno.2.6, ROIno.2.7 on chr2



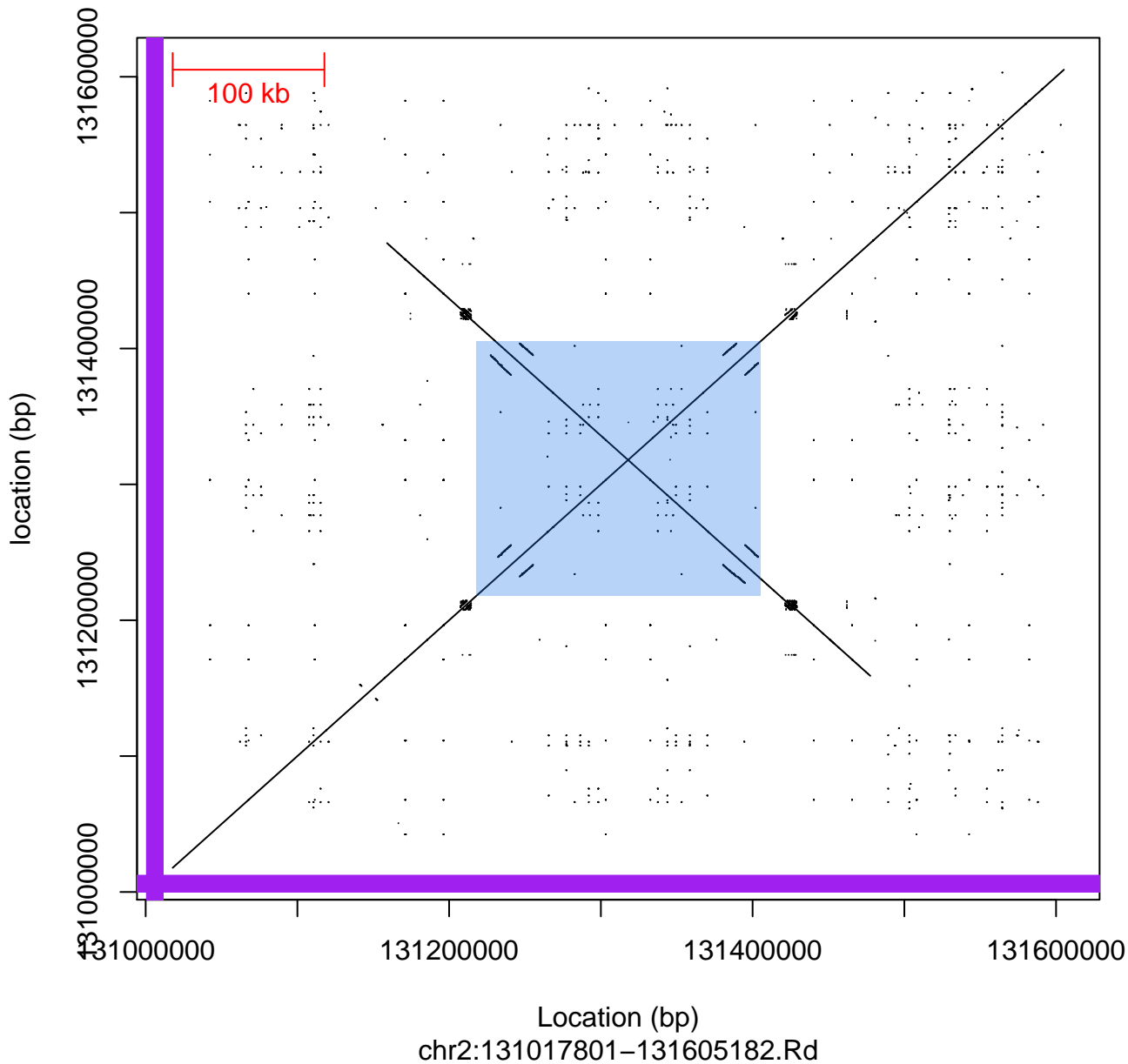
Dotplot of mBM.2.2, ROIno.2.8 on chr2



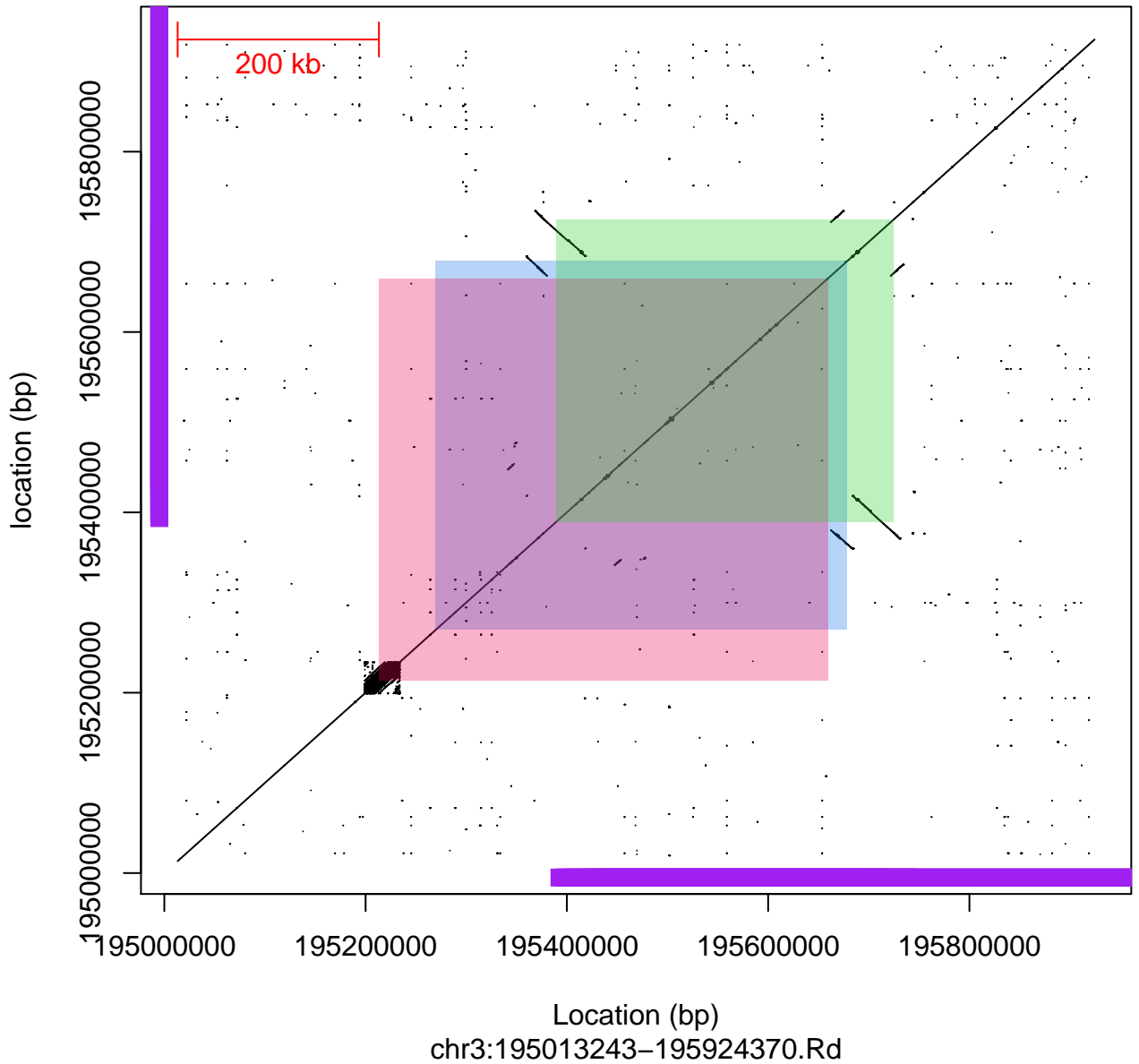
Dotplot of mBM.2.3, ROIno.2.13 on chr2



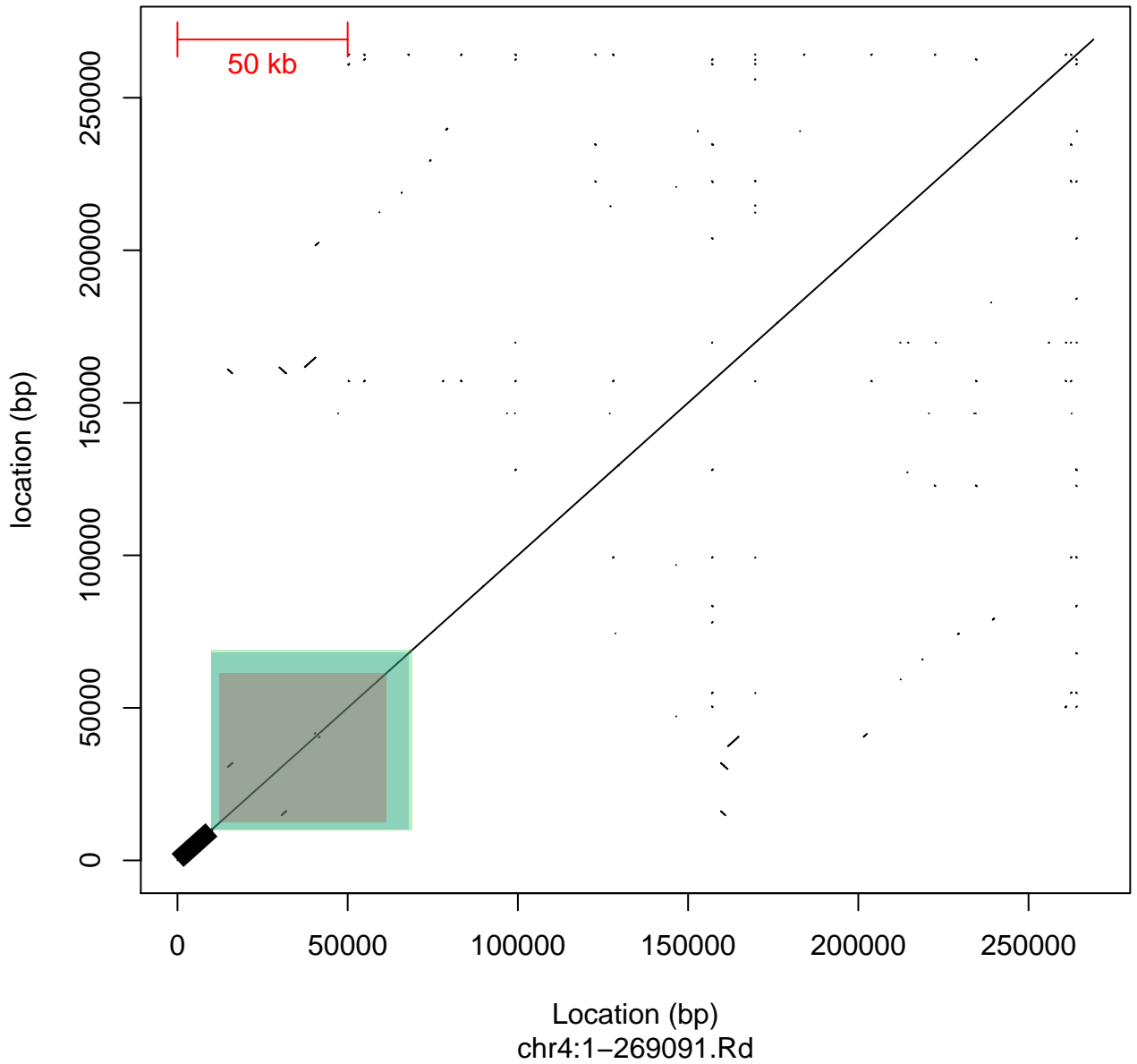
Dotplot of mBM.2.4 on chr2



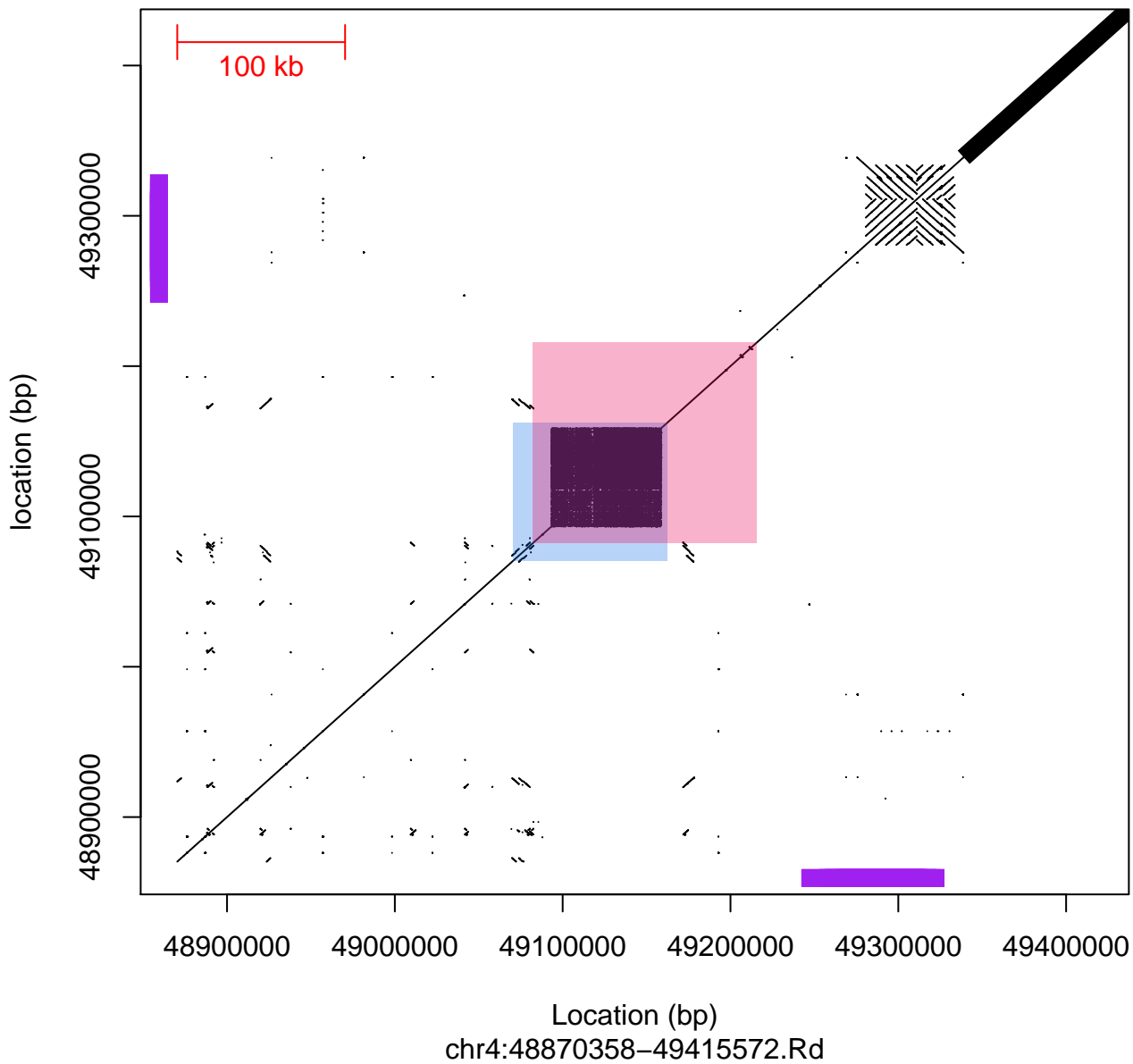
Dotplot of mBM.3.1, fCB.3.1, ROIno.3.2 on chr3



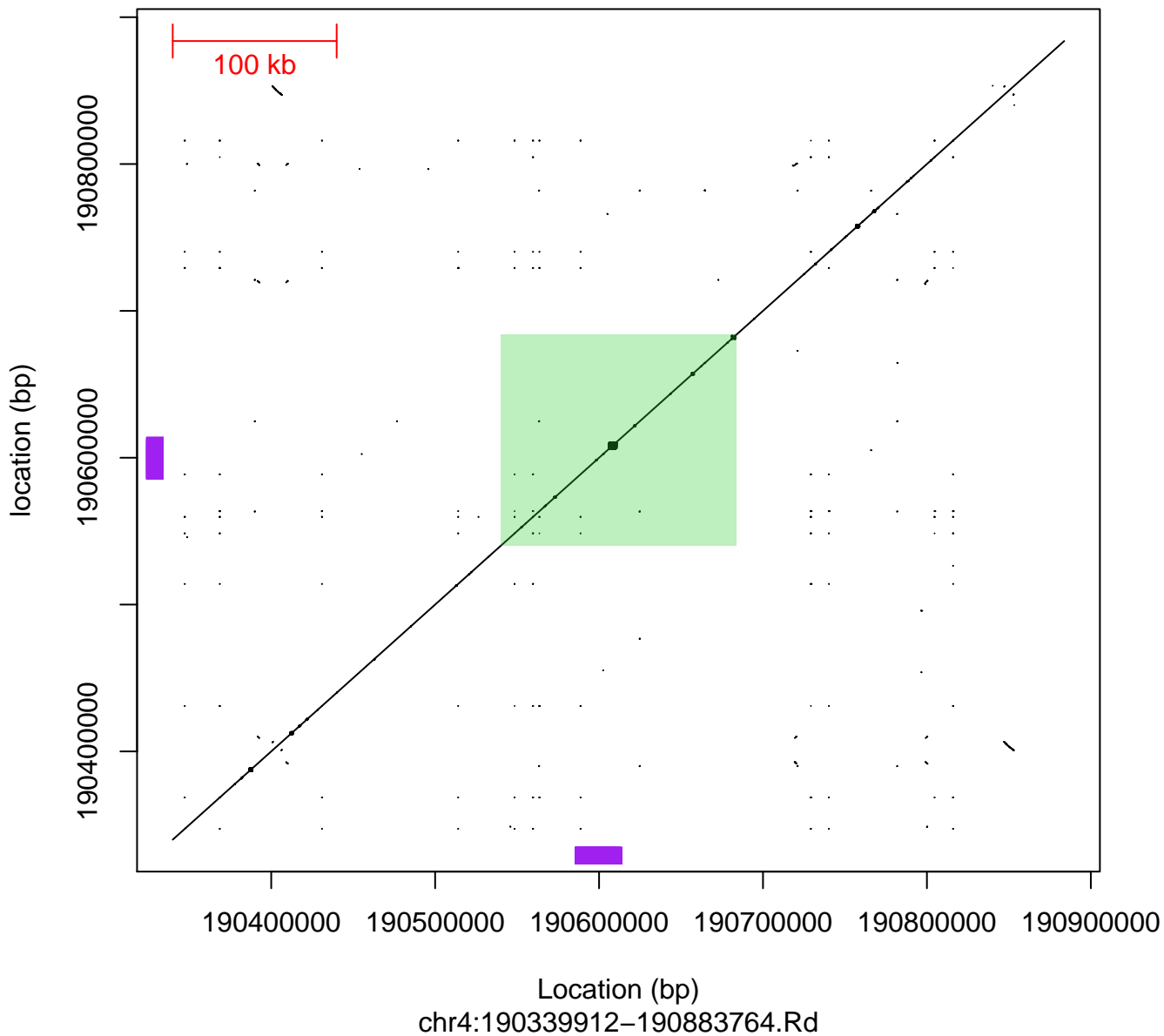
Dotplot of mBM.4.1, fCB.4.1, ROIno.4.1 on chr4



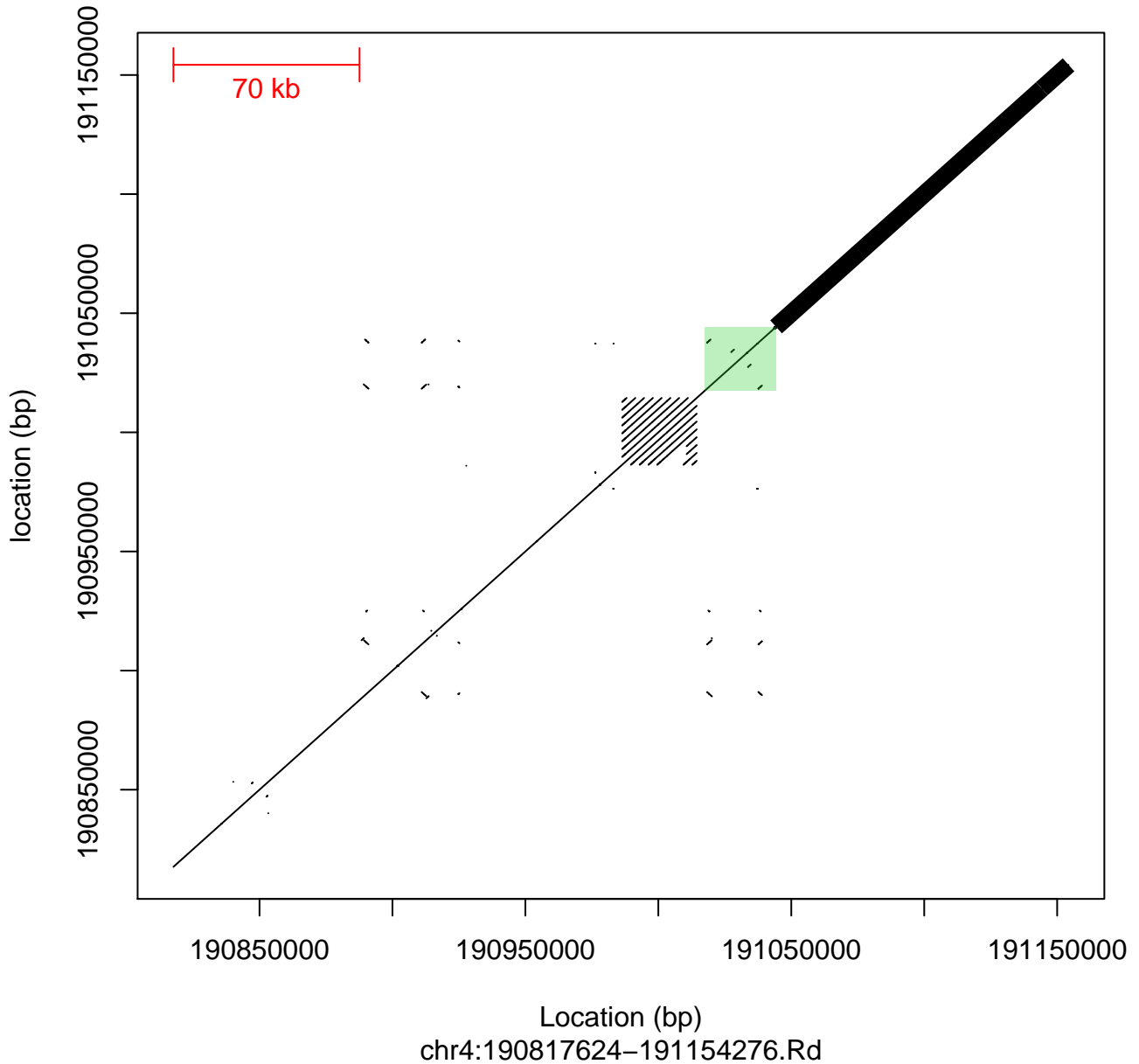
Dotplot of mBM.4.2, fCB.4.2 on chr4



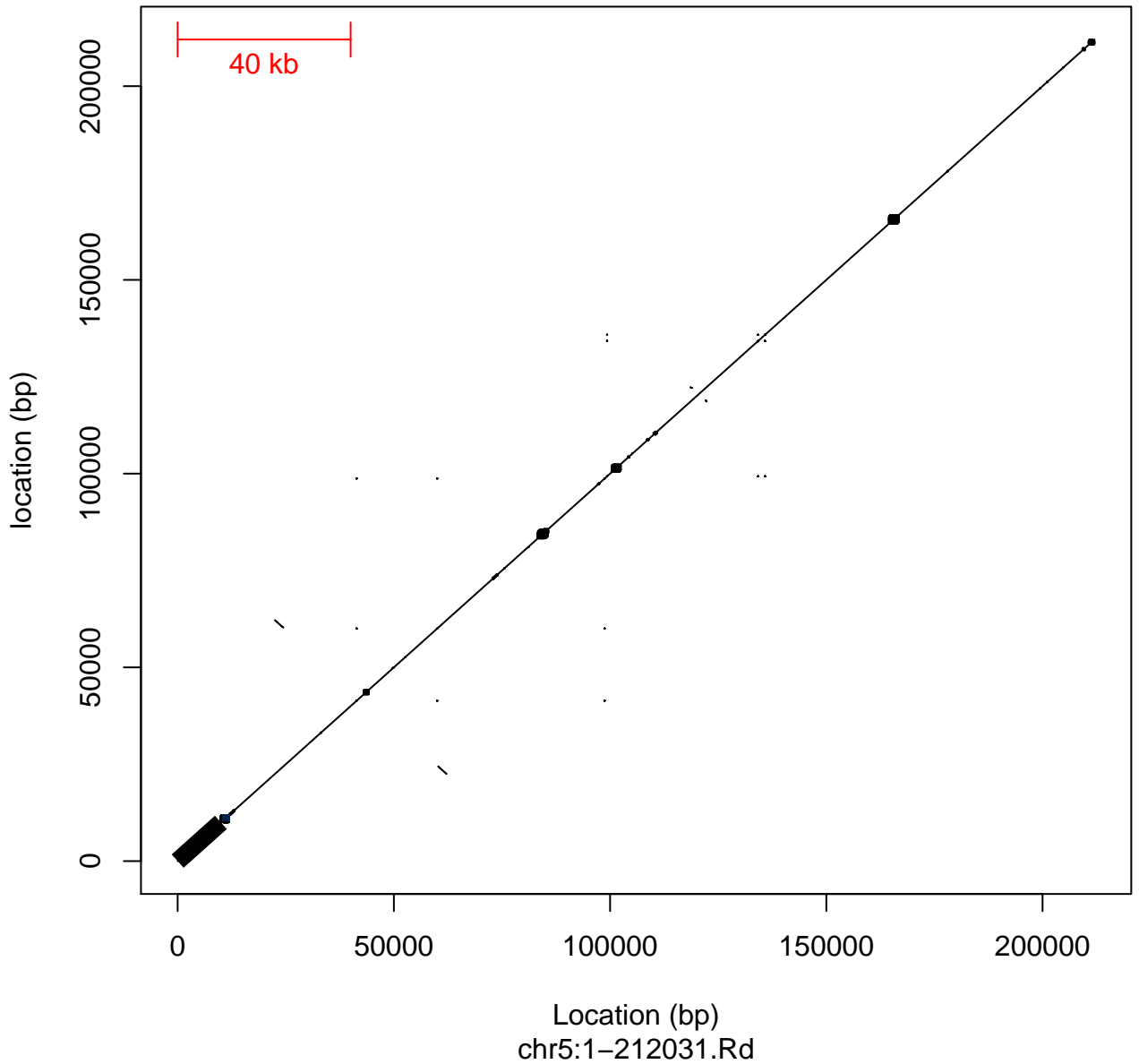
Dotplot of ROIno.4.4 on chr4



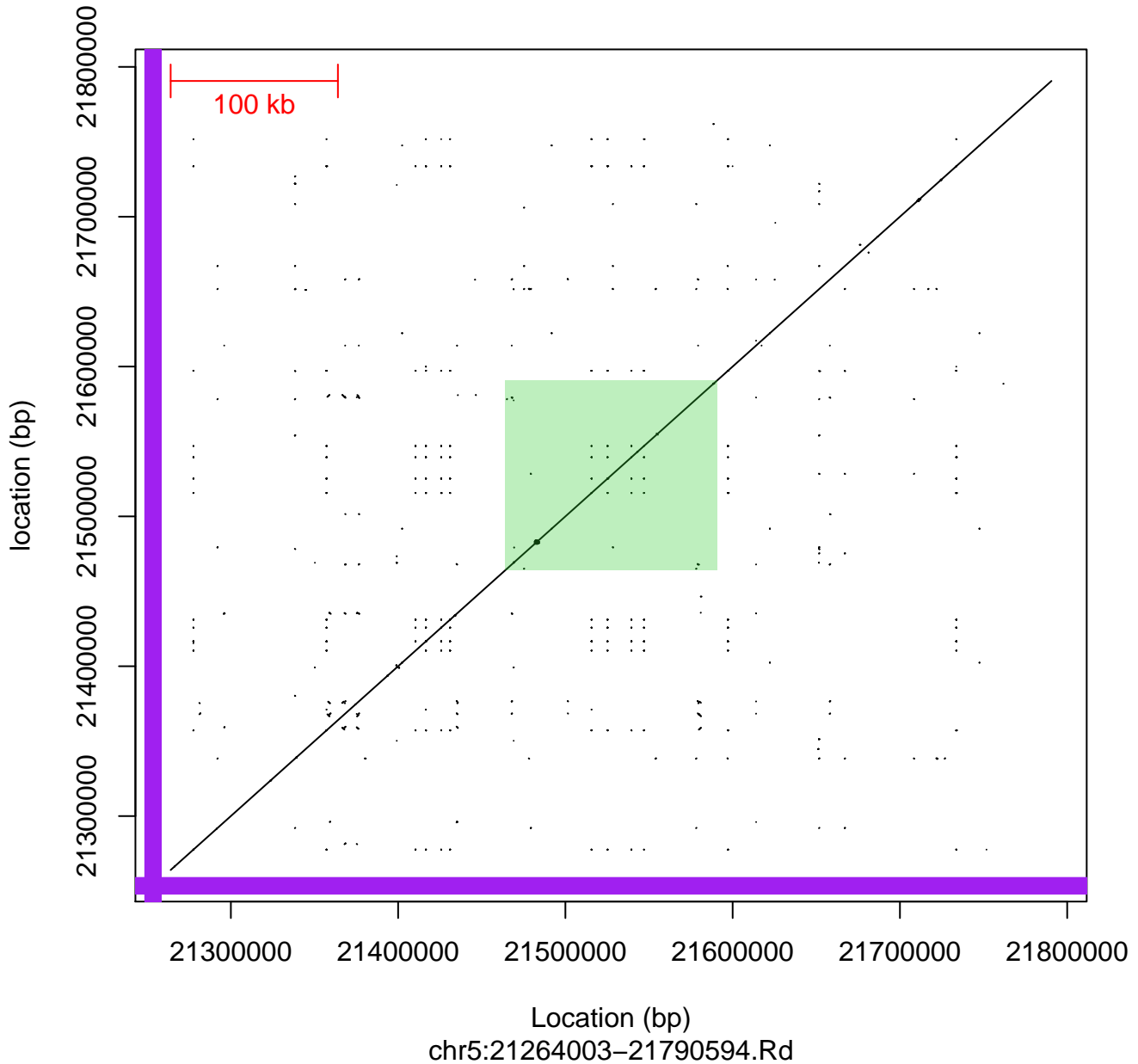
Dotplot of ROIno.4.5 on chr4



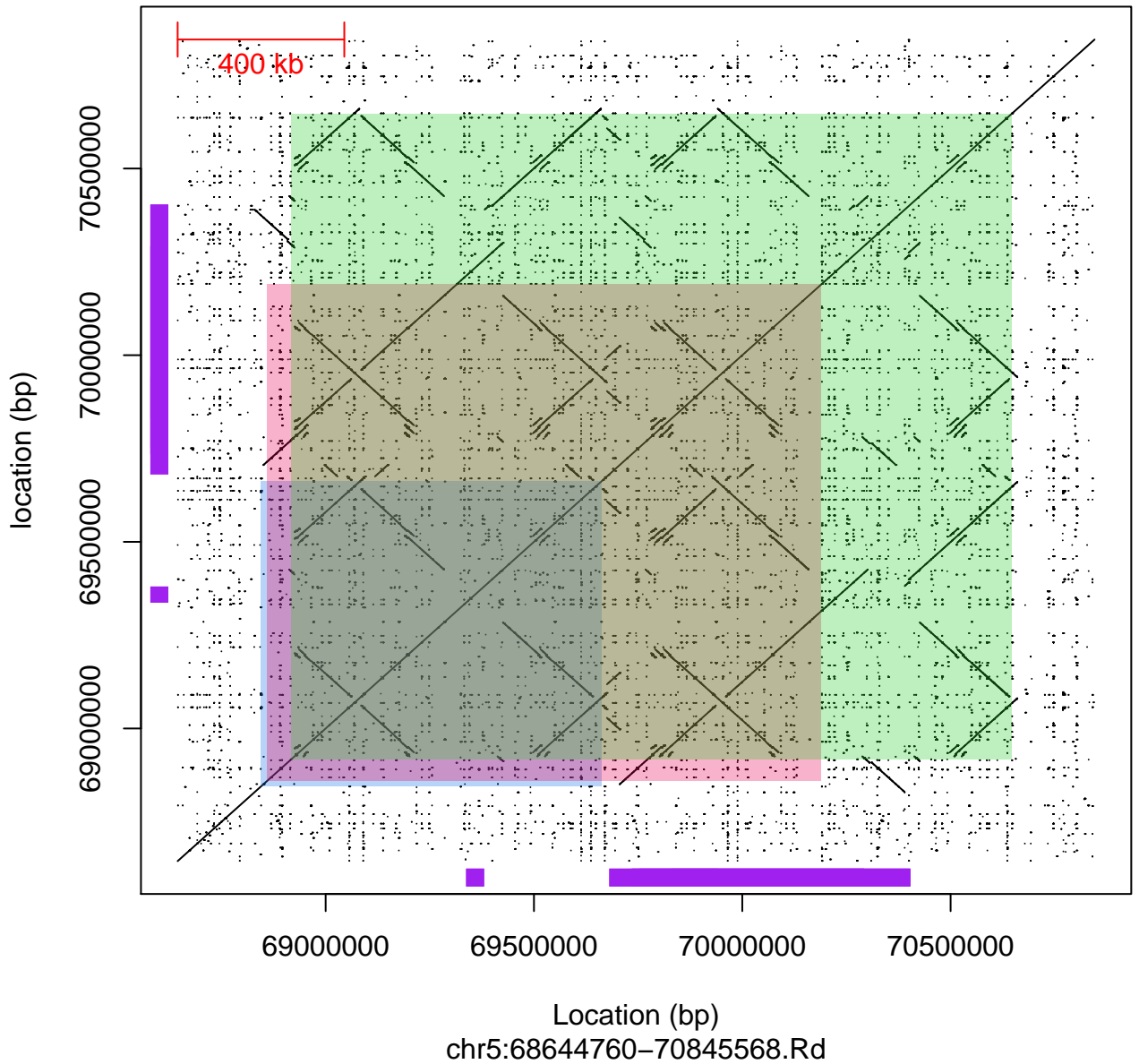
Dotplot of mBM.5.1 on chr5



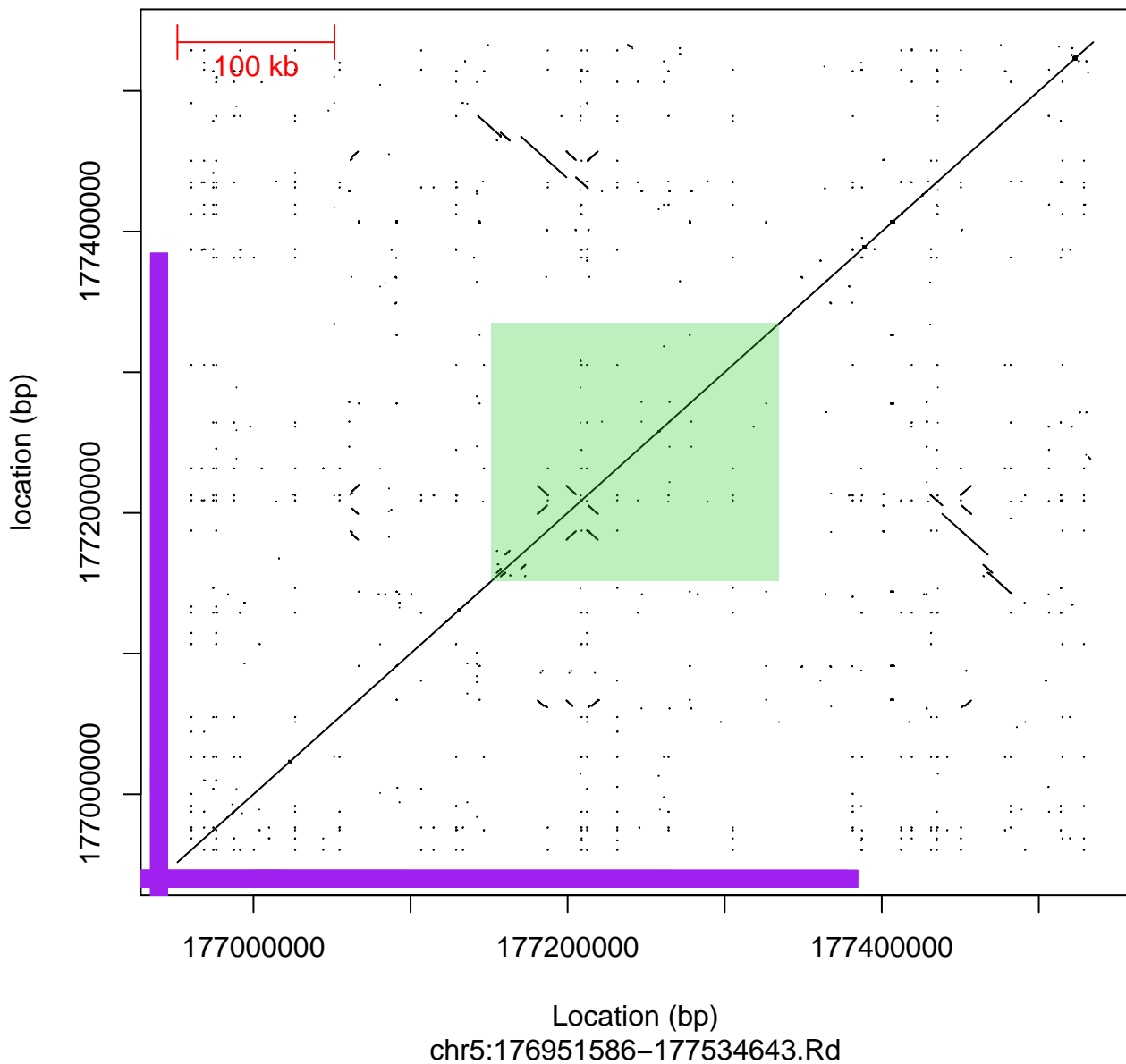
Dotplot of ROIno.5.1 on chr5



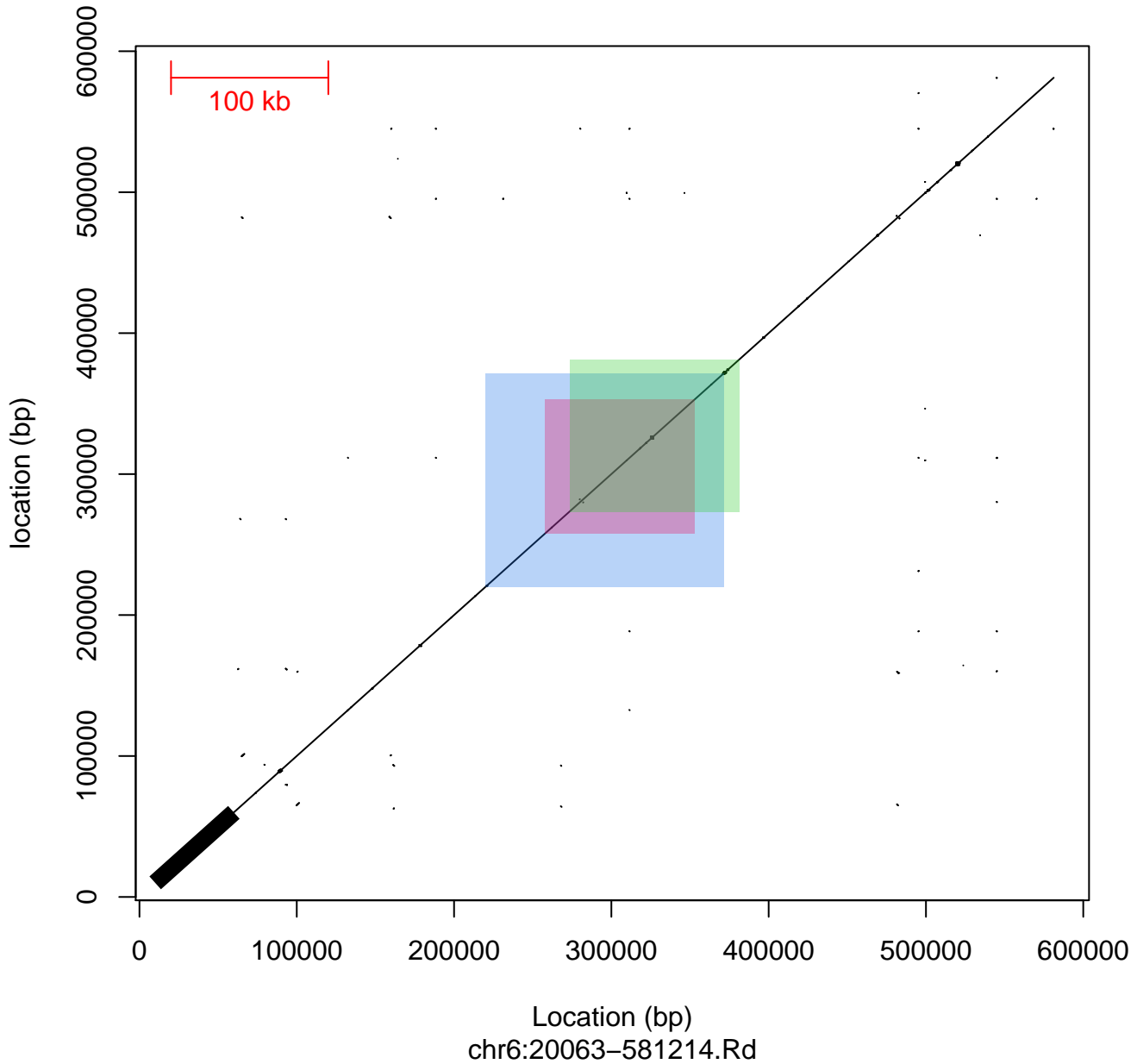
Dotplot of mBM.5.2, fCB.5.1, ROIno.5.2 on chr5



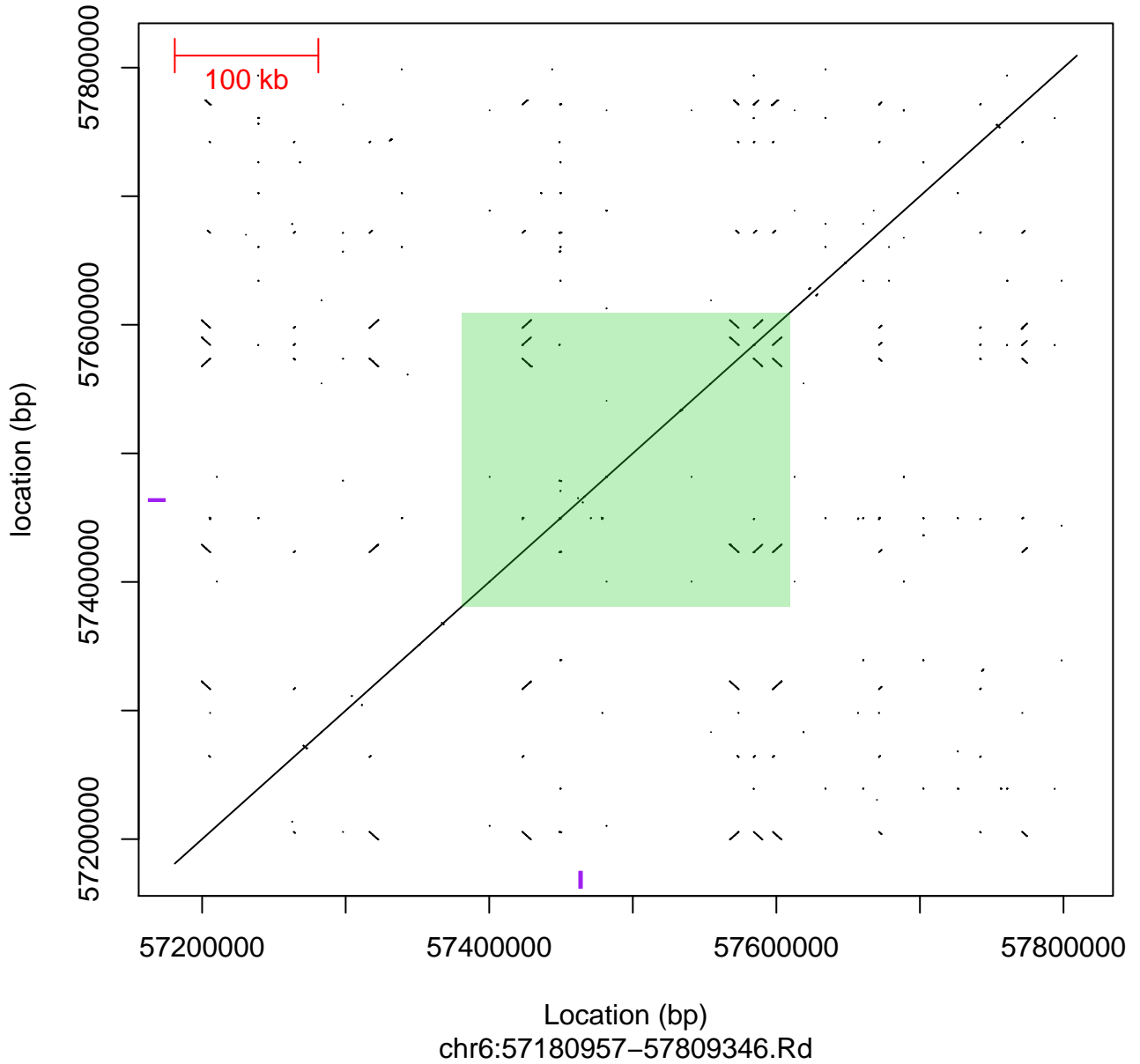
Dotplot of ROIno.5.4 on chr5



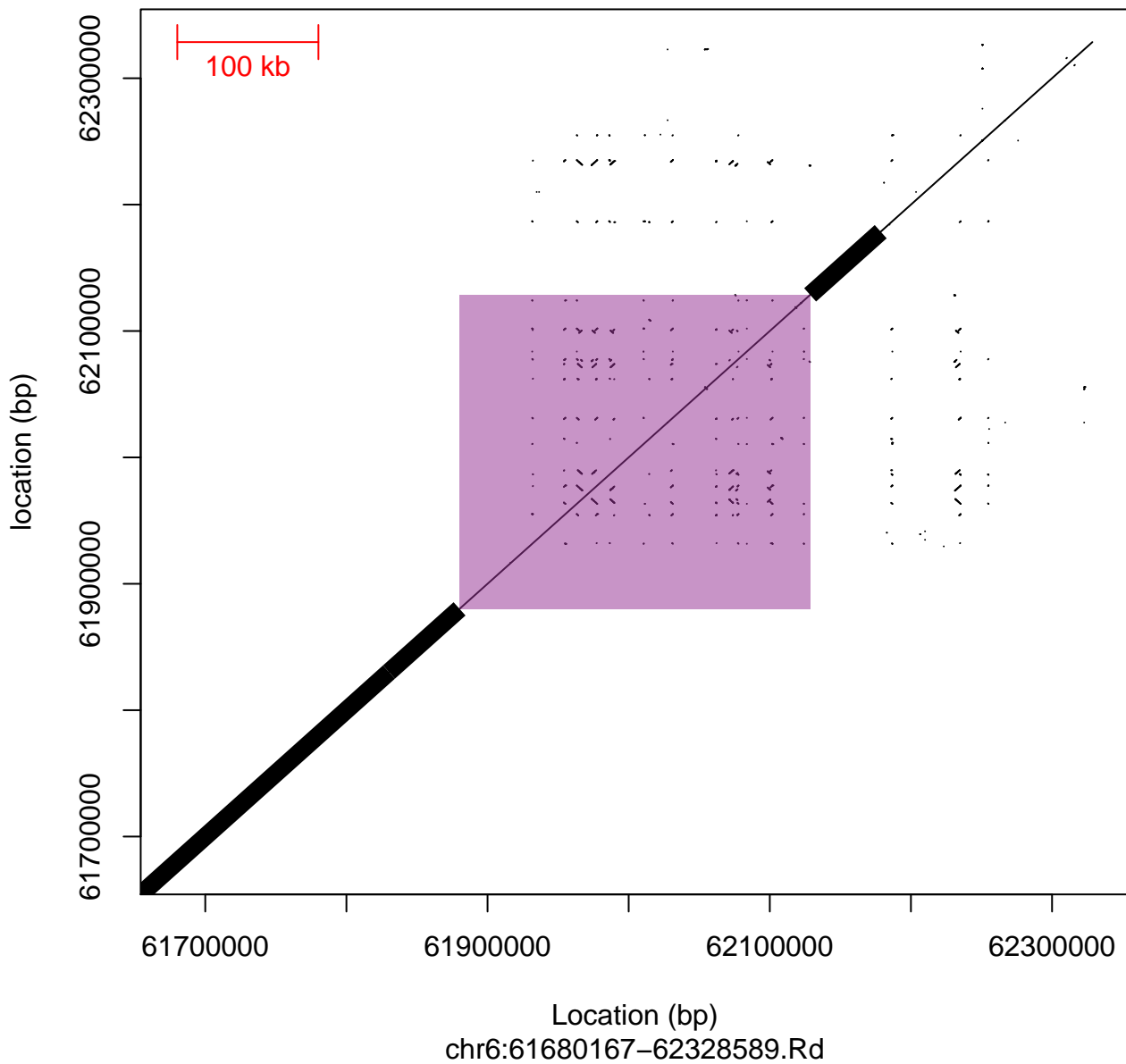
Dotplot of mBM.6.1, fCB.6.1, ROIno.6.1 on chr6



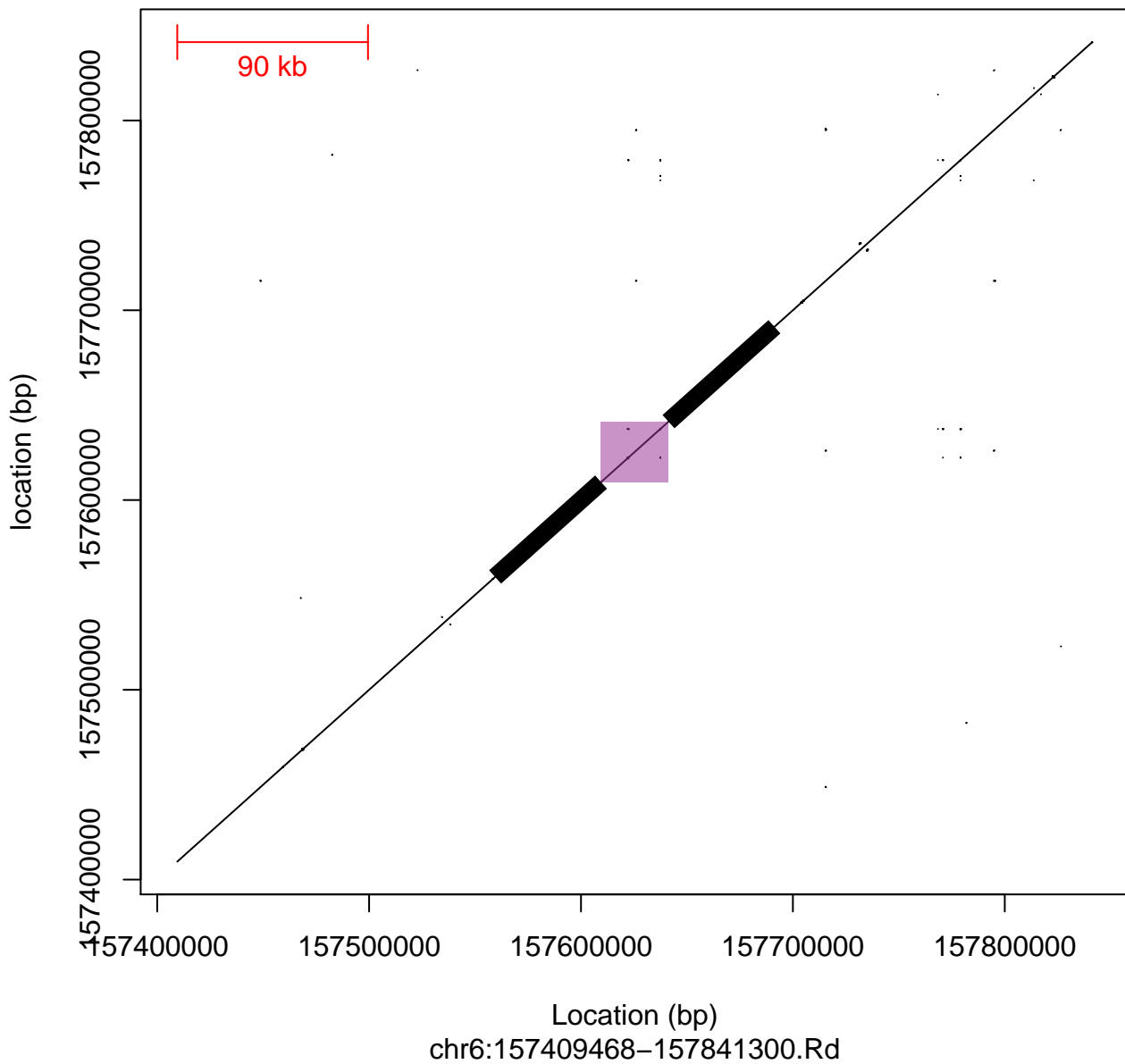
Dotplot of ROIno.6.4 on chr6



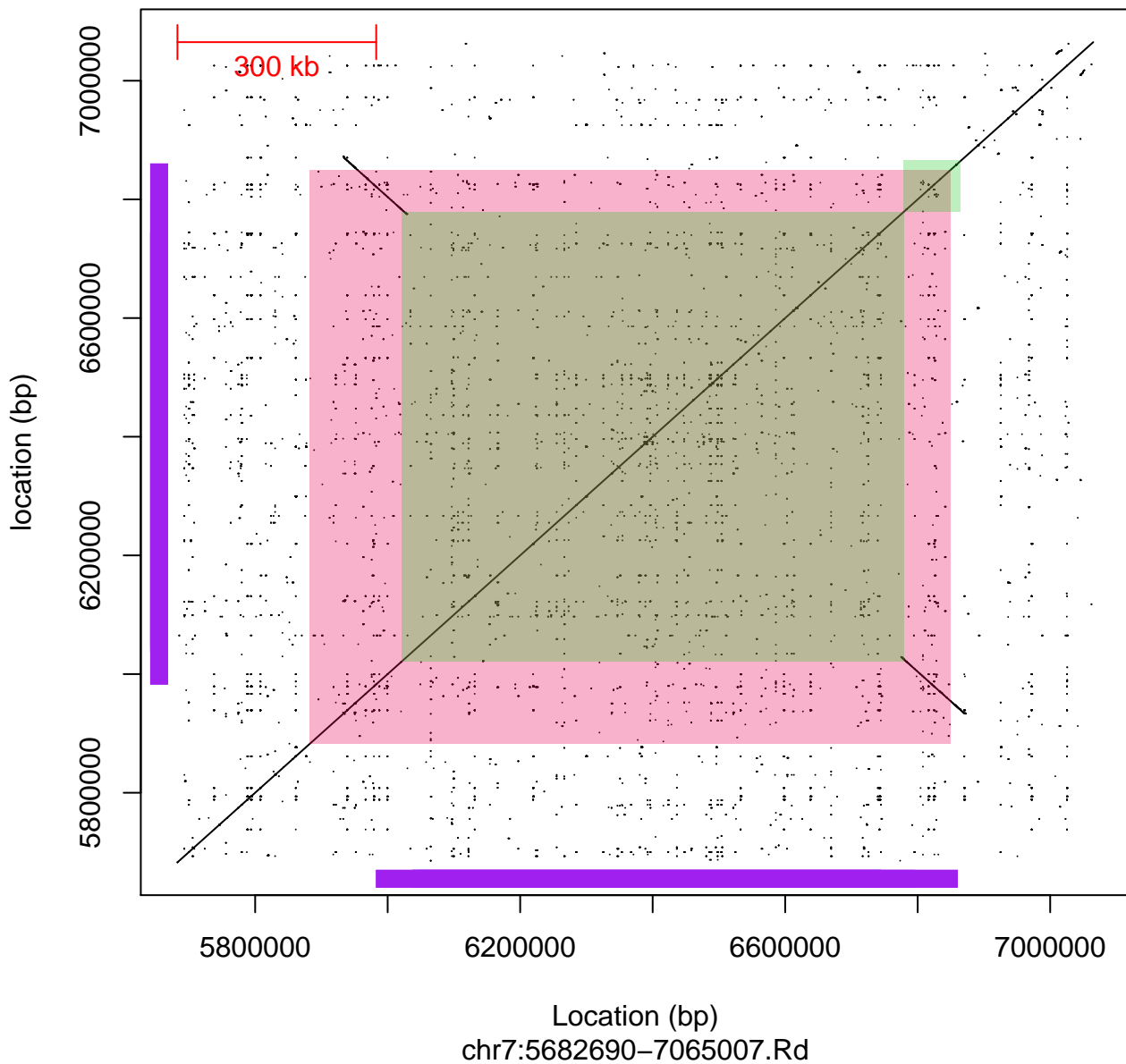
Dotplot of mBM.6.2, fCB.6.2 on chr6



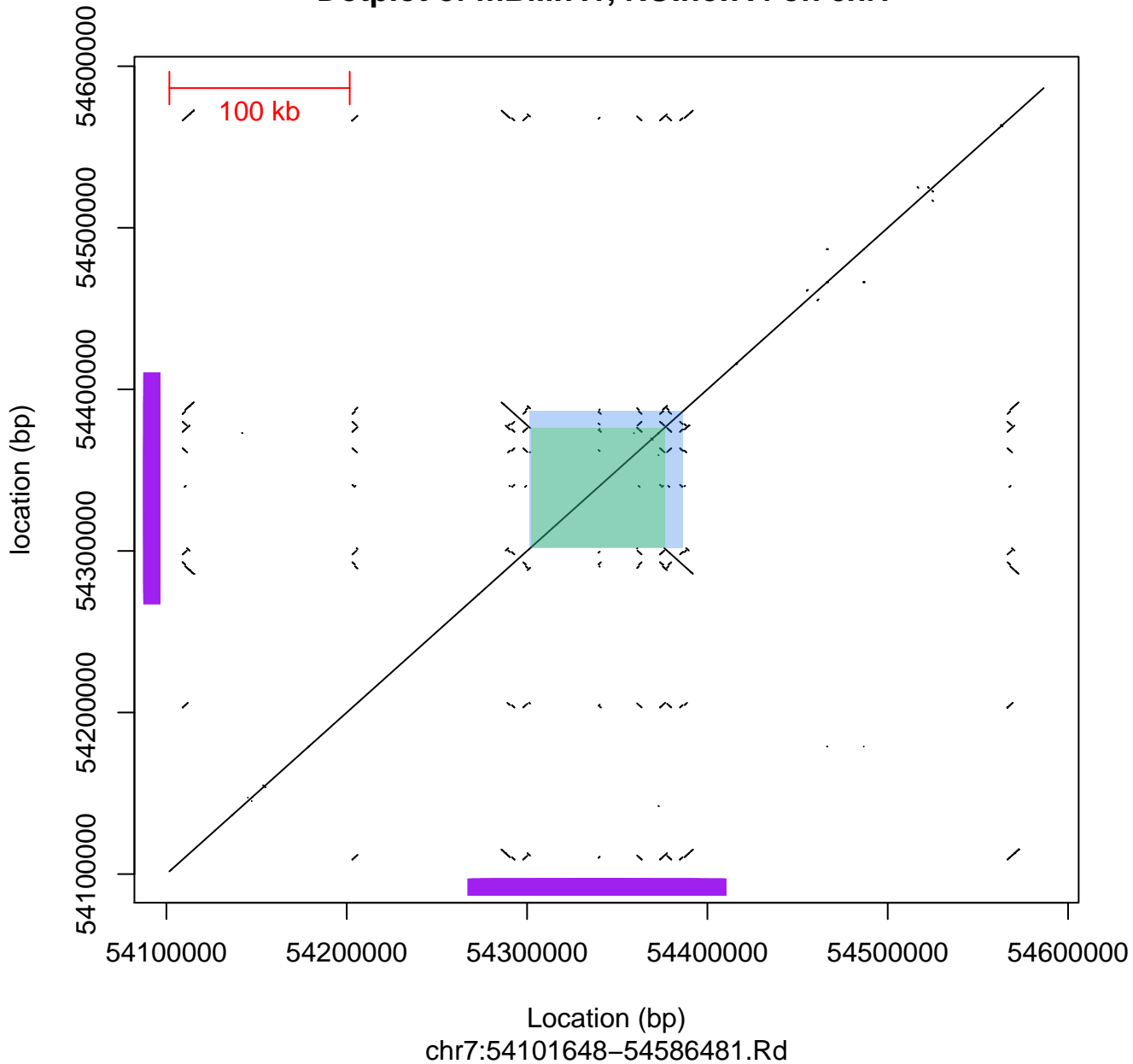
Dotplot of mBM.6.3, fCB.6.3 on chr6



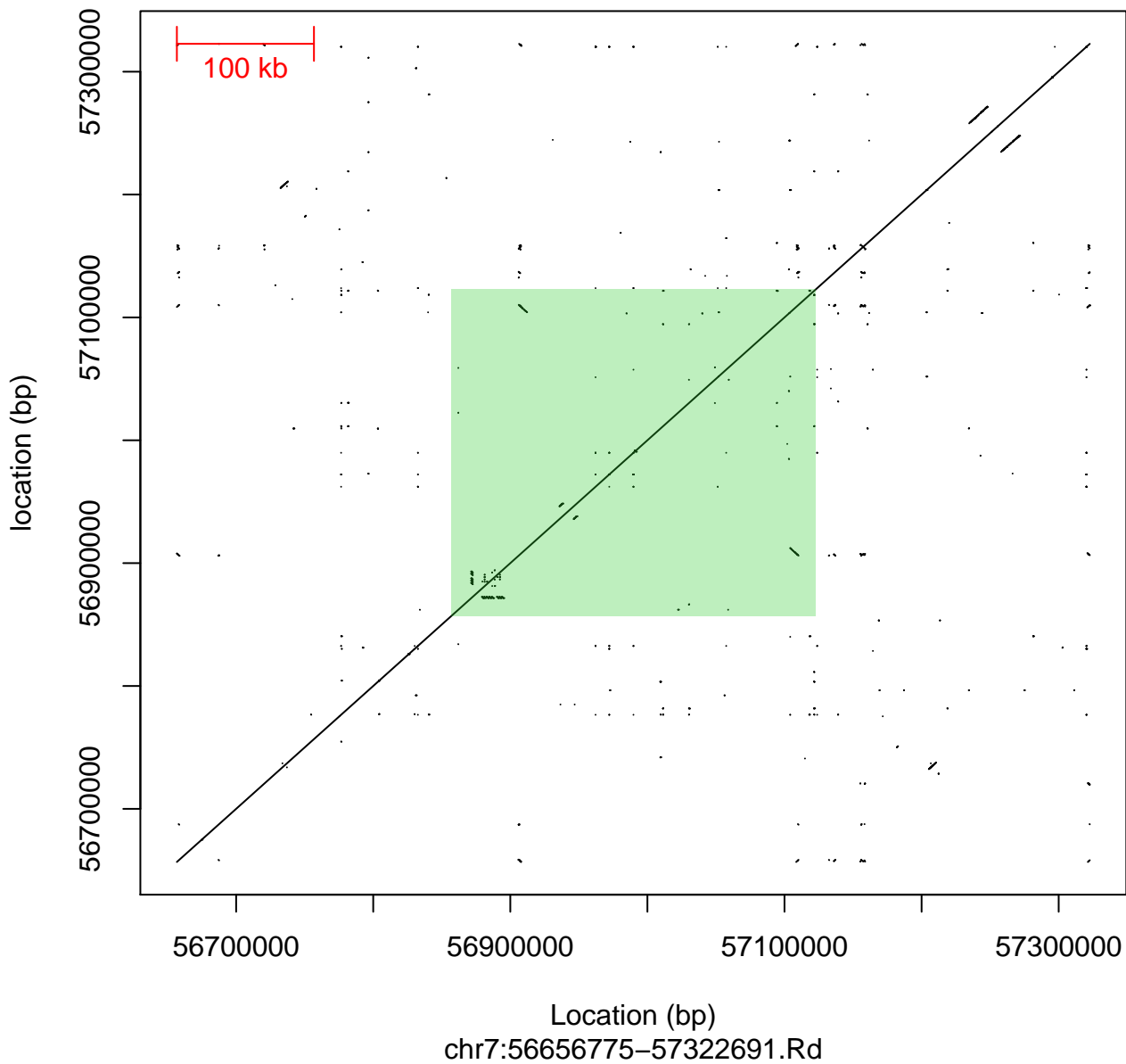
Dotplot of fCB.7.1, ROIno.7.2, ROIno.7.3 on chr7



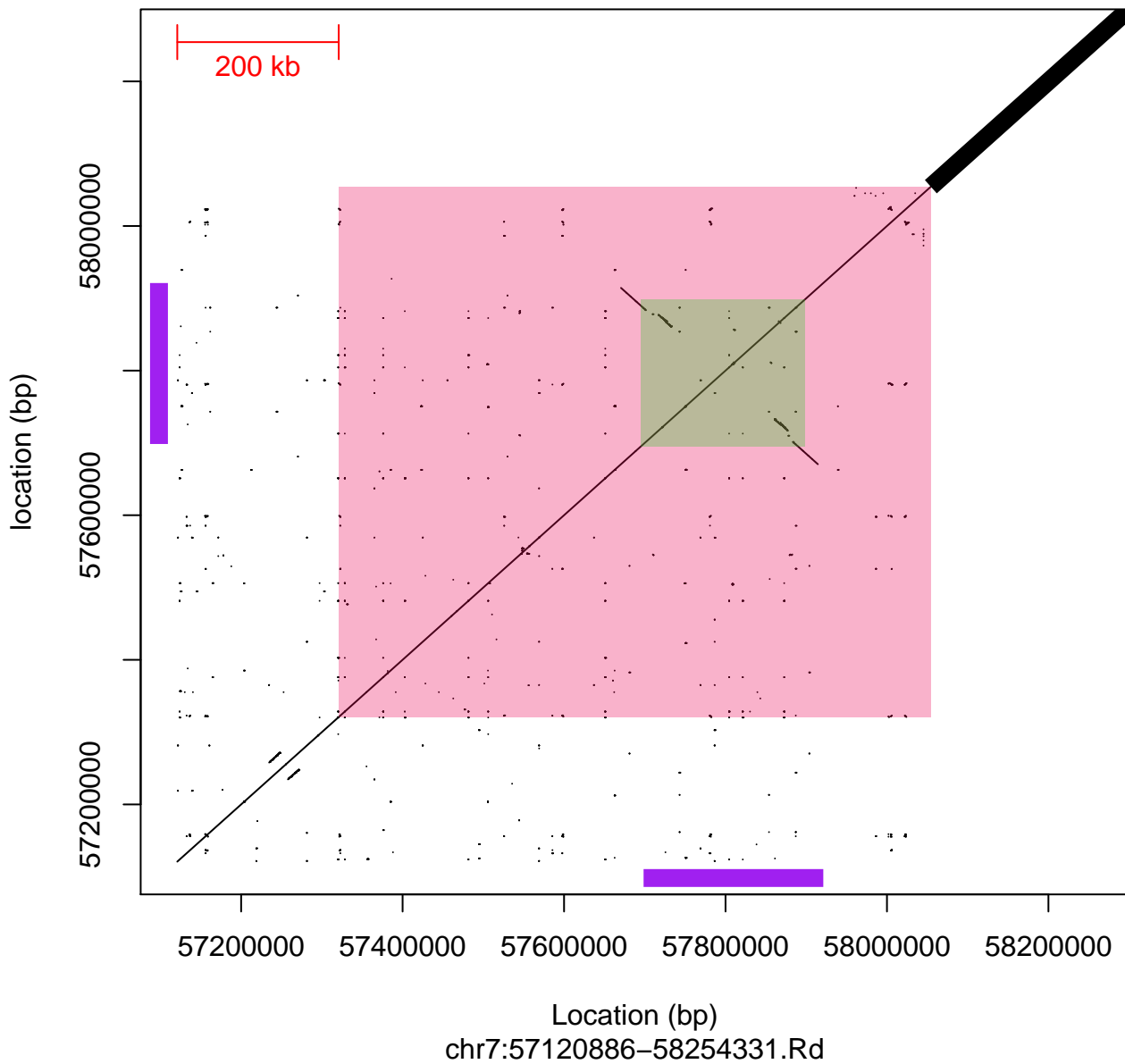
Dotplot of mBM.7.1, ROIno.7.4 on chr7



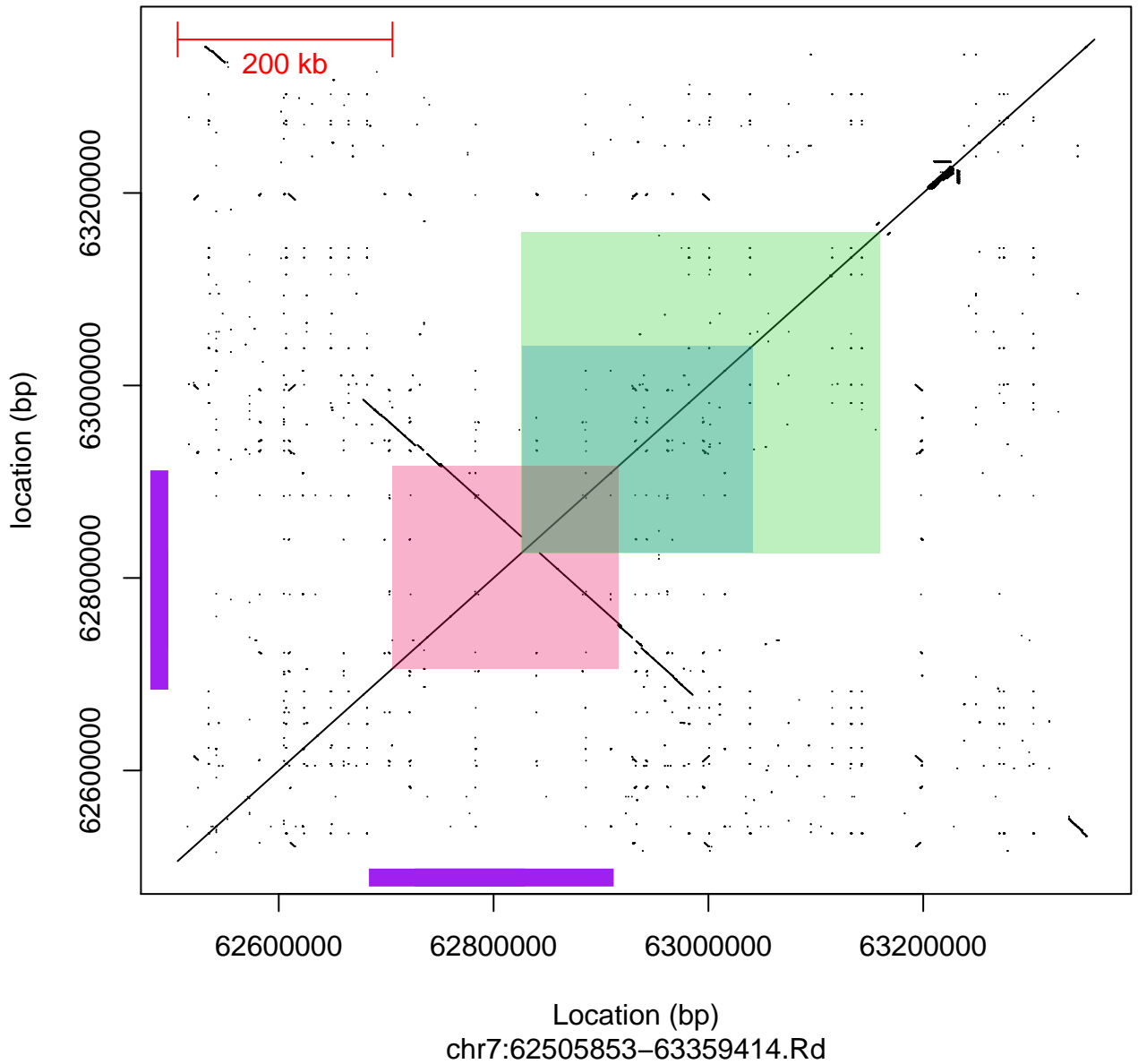
Dotplot of ROIno.7.5 on chr7



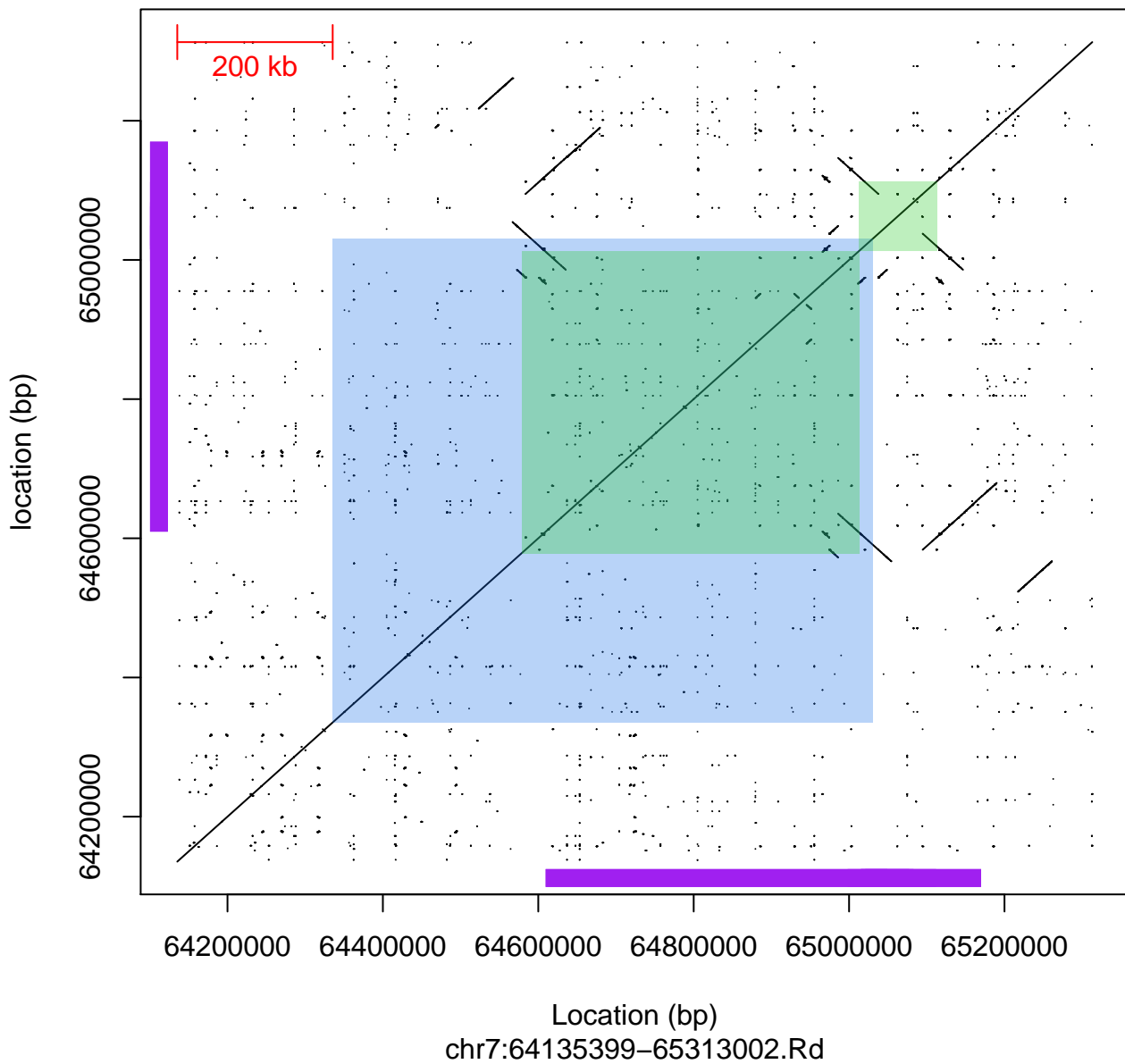
Dotplot of fCB.7.2, ROIno.7.6 on chr7



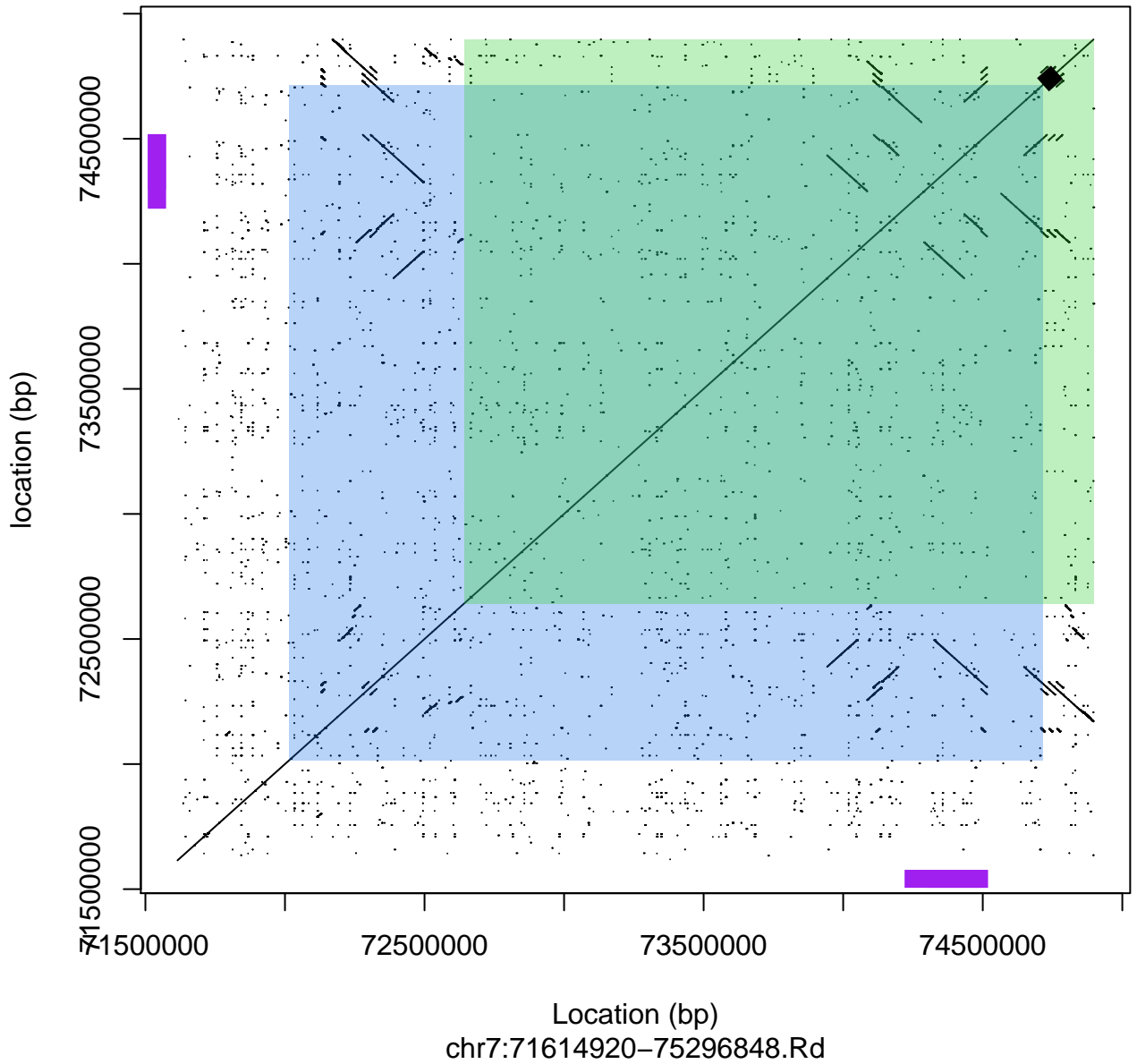
Dotplot of mBM.7.2, fCB.7.3, ROIno.7.9 on chr7



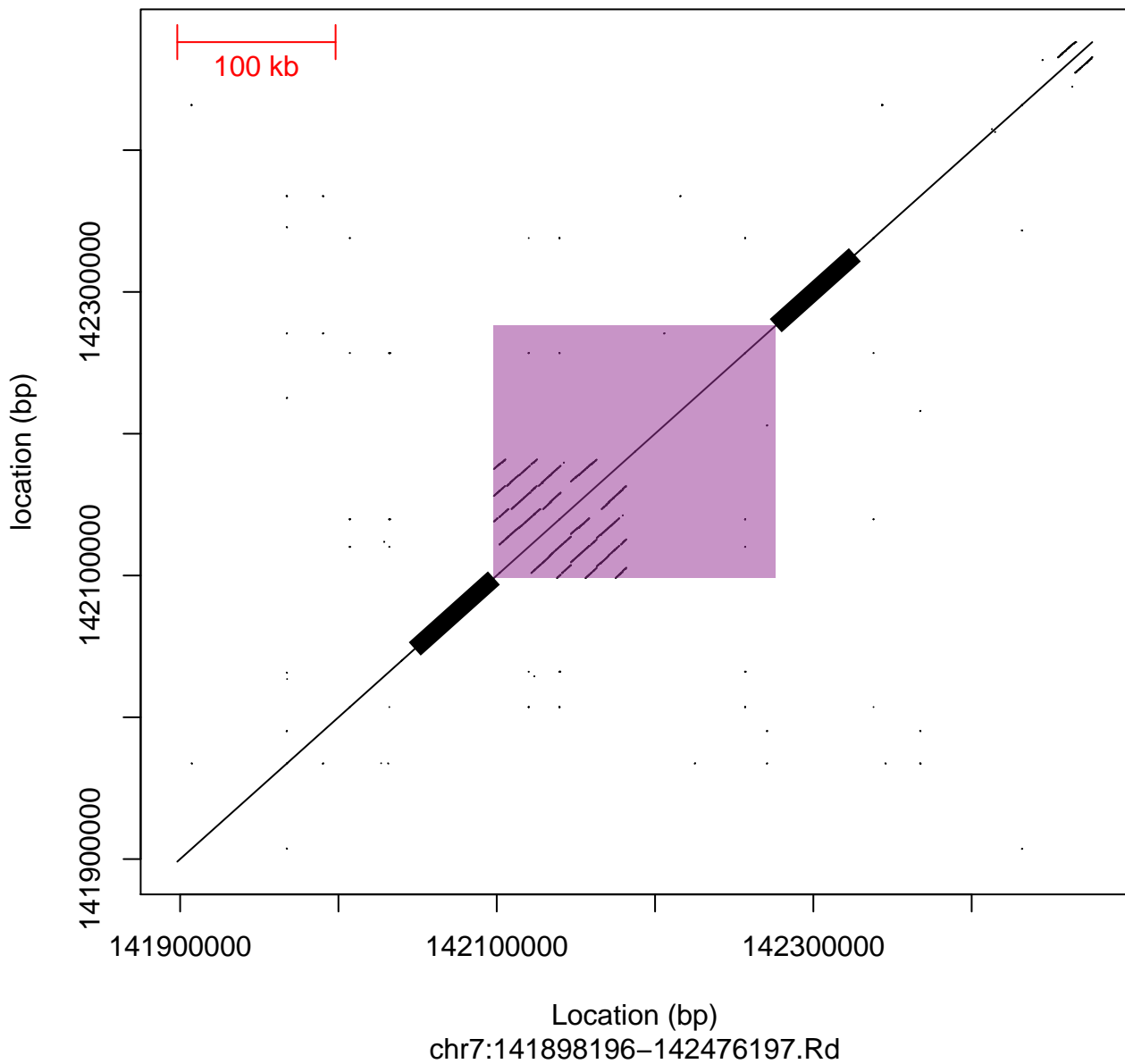
Dotplot of mBM.7.3, ROIno.7.10, ROIno.7.11 on chr7



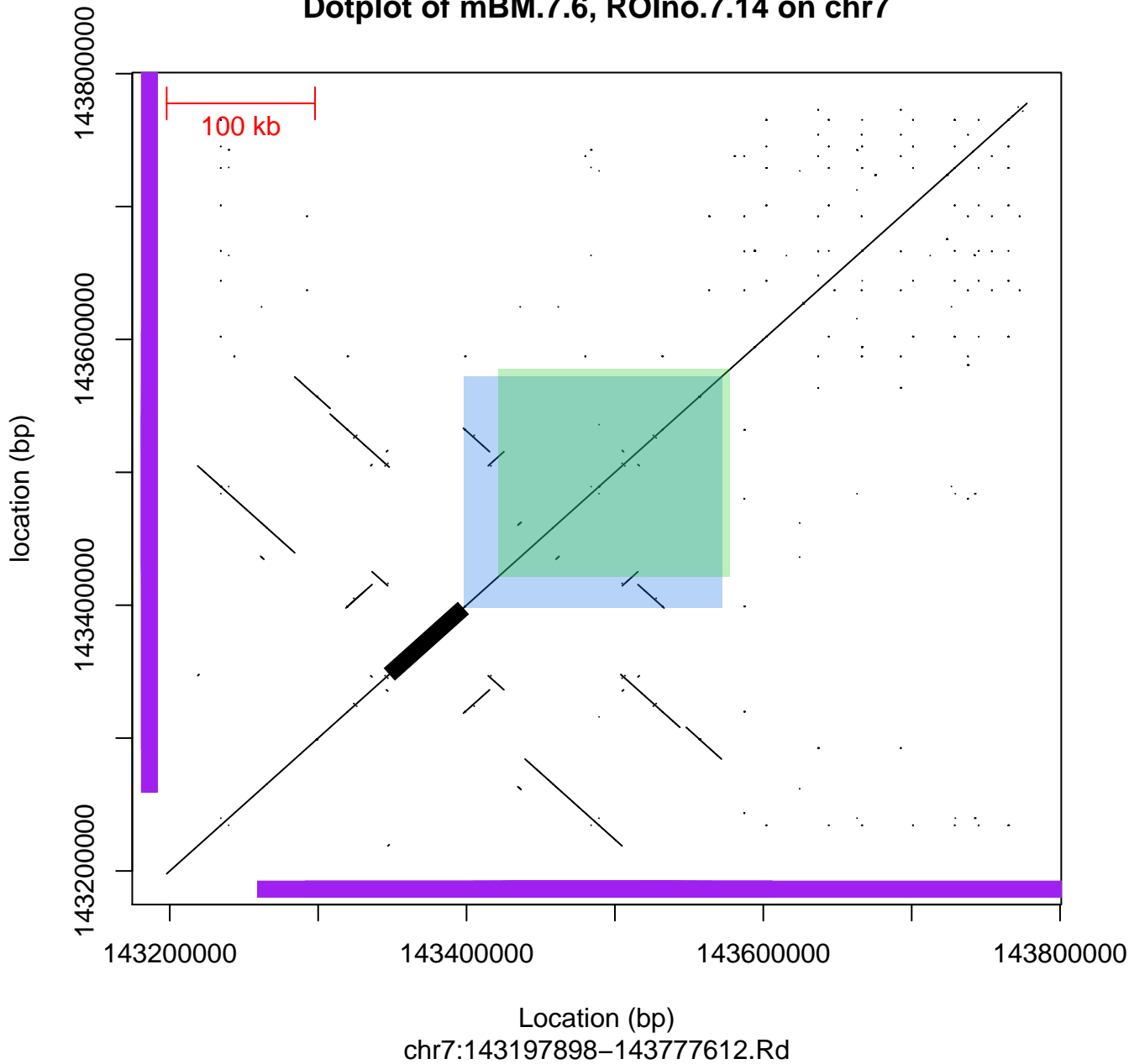
Dotplot of mBM.7.4, ROIno.7.12 on chr7



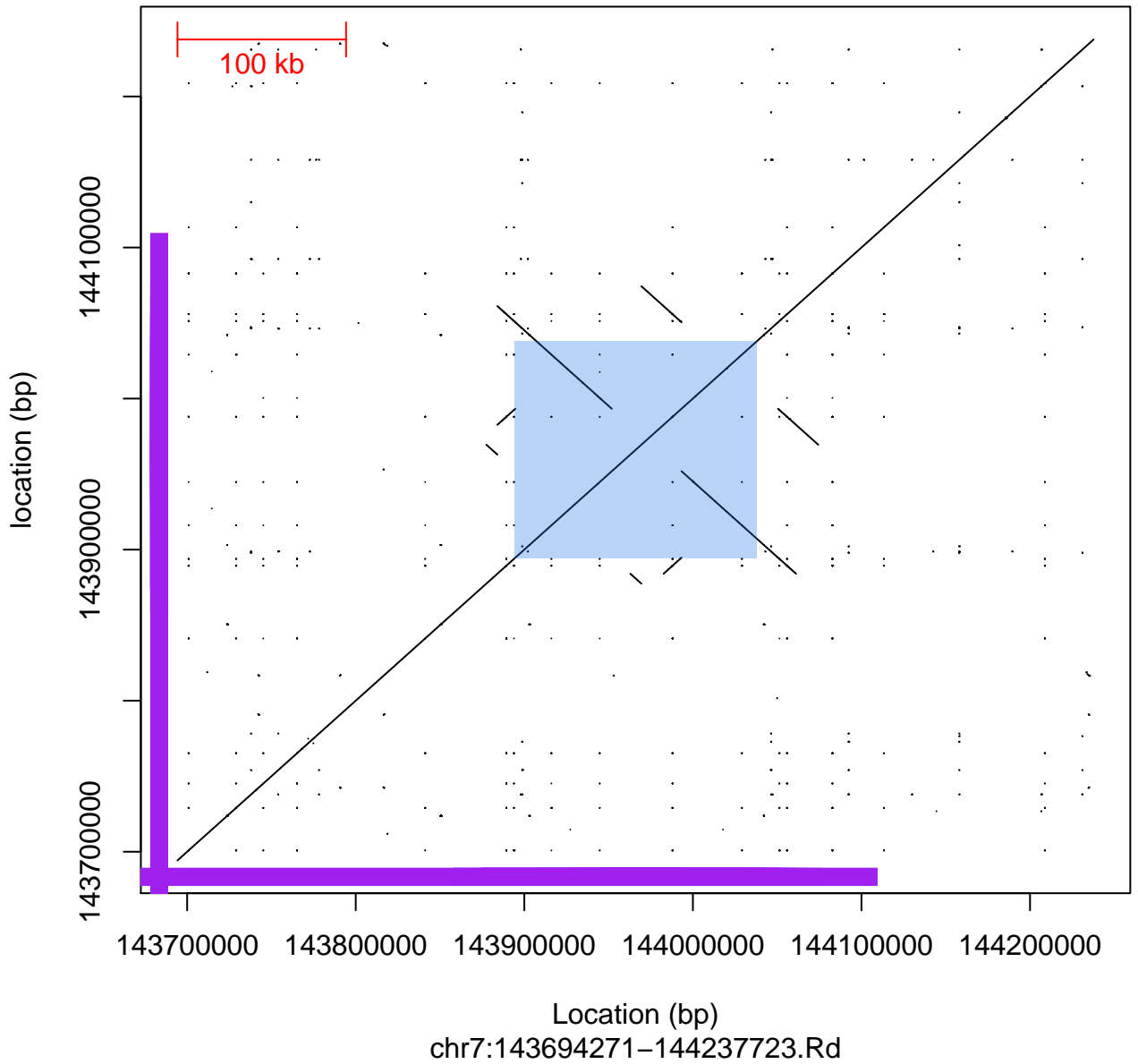
Dotplot of mBM.7.5, fCB.7.4 on chr7



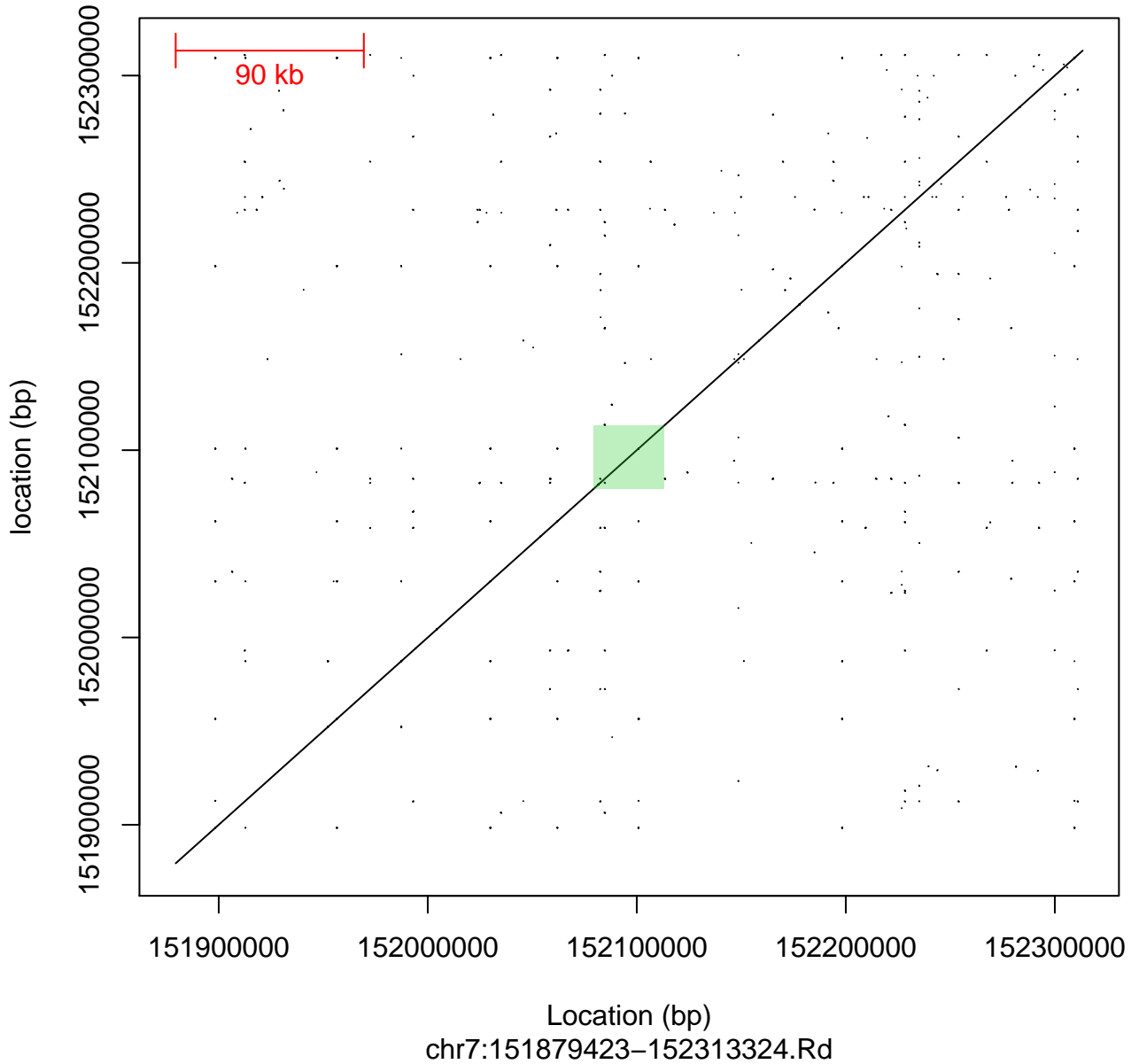
Dotplot of mBM.7.6, ROIno.7.14 on chr7



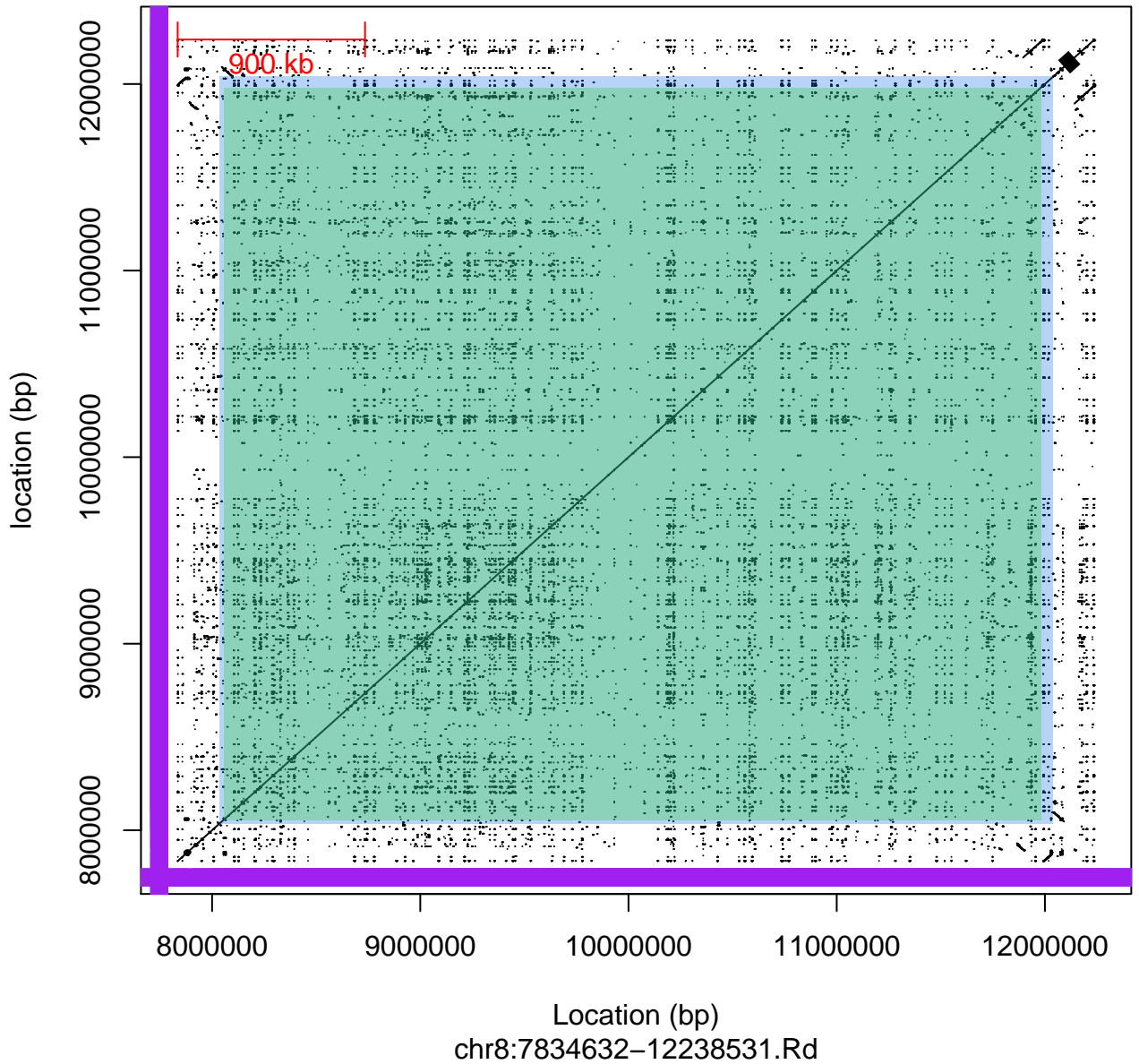
Dotplot of mBM.7.7 on chr7



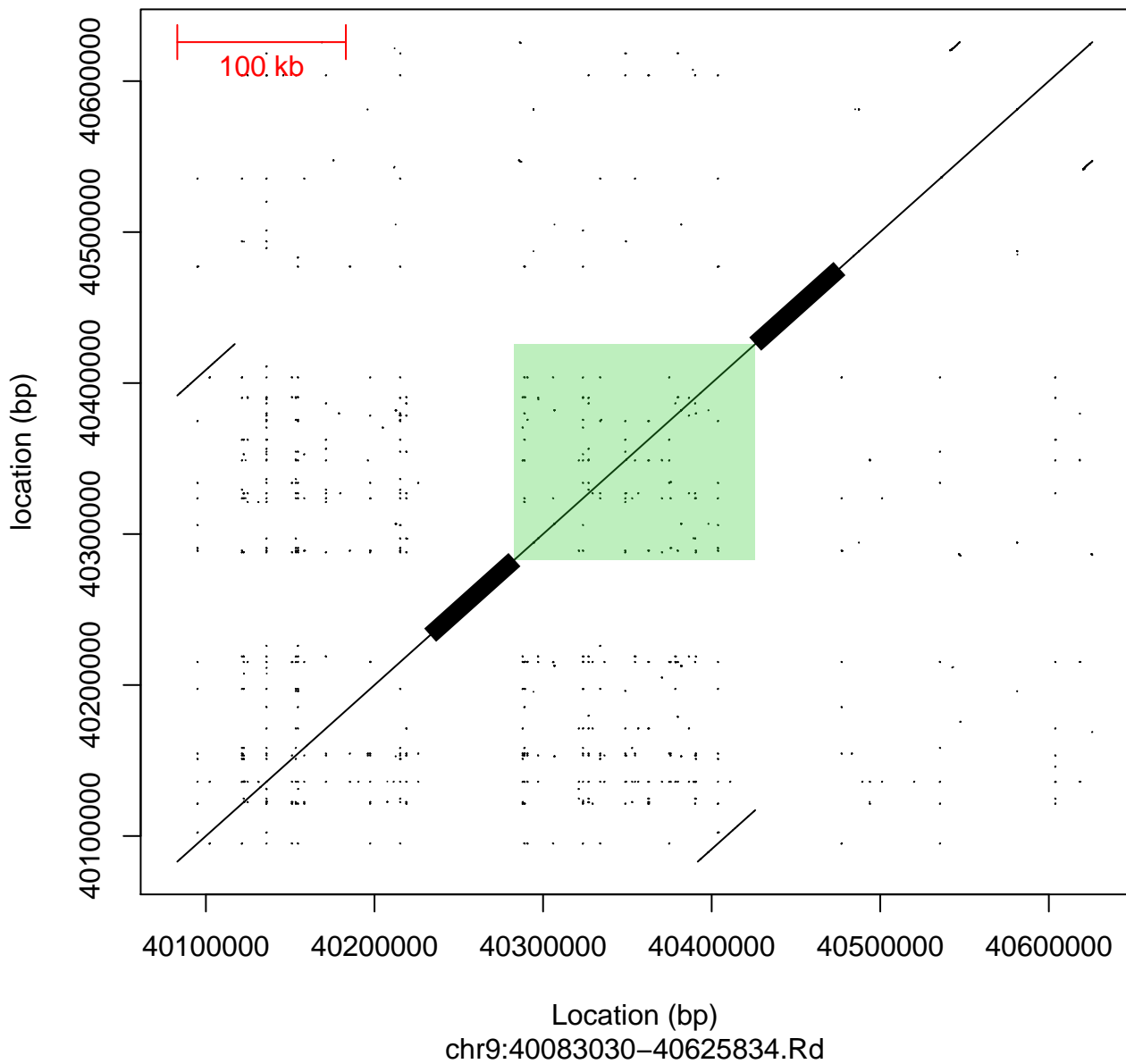
Dotplot of ROIno.7.17 on chr7



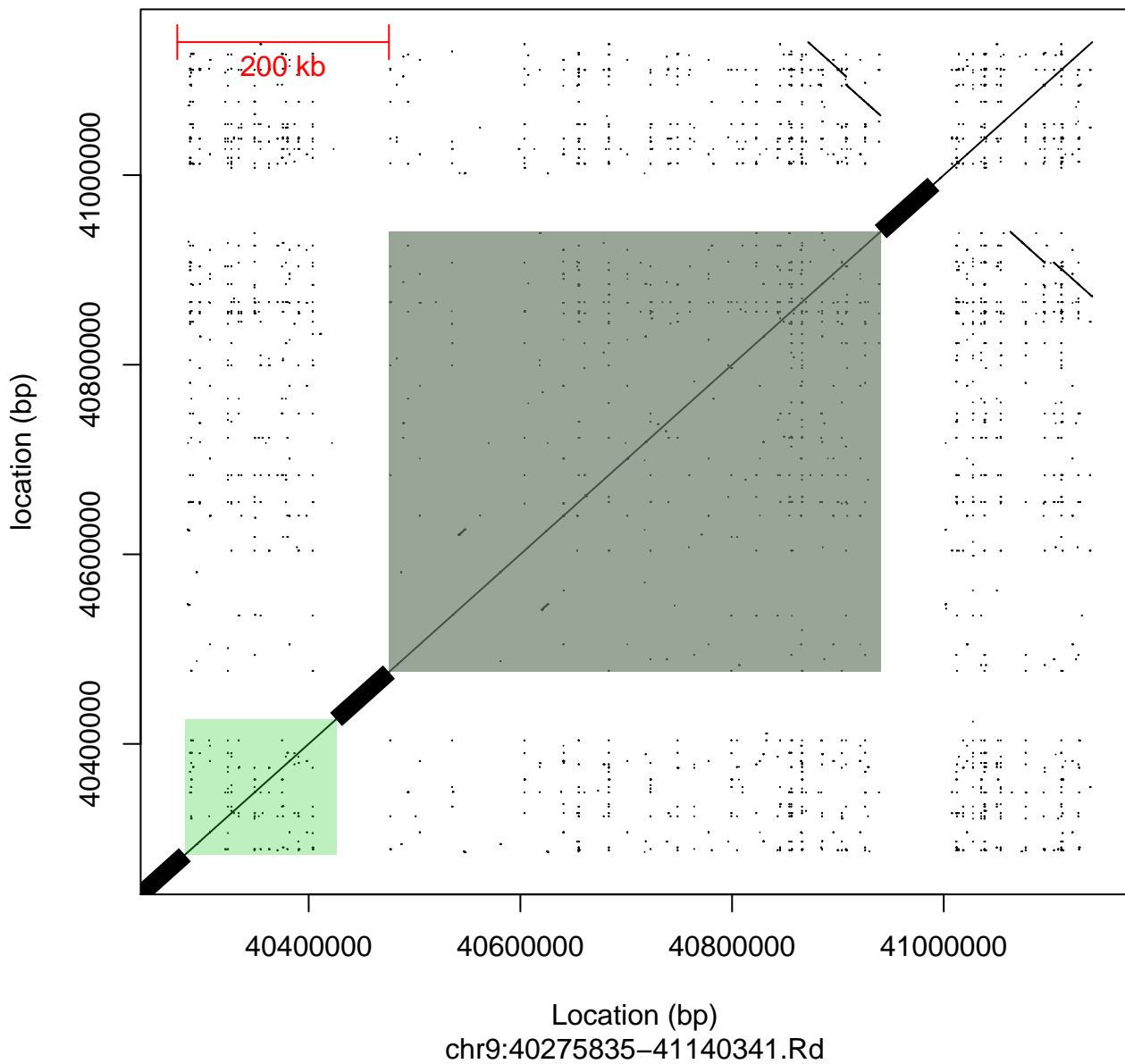
Dotplot of mBM.8.1, ROIno.8.3 on chr8



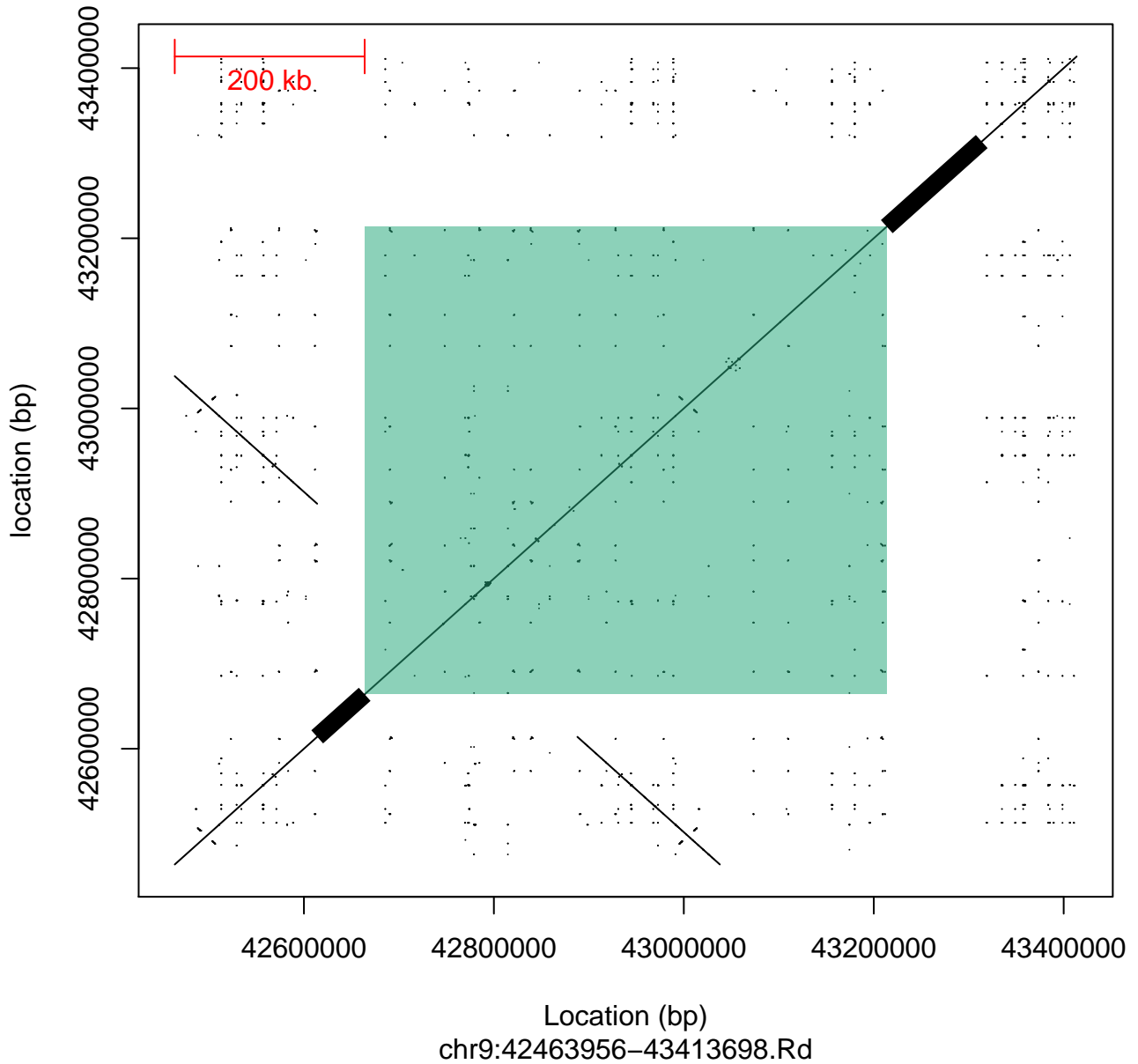
Dotplot of ROIno.9.3 on chr9



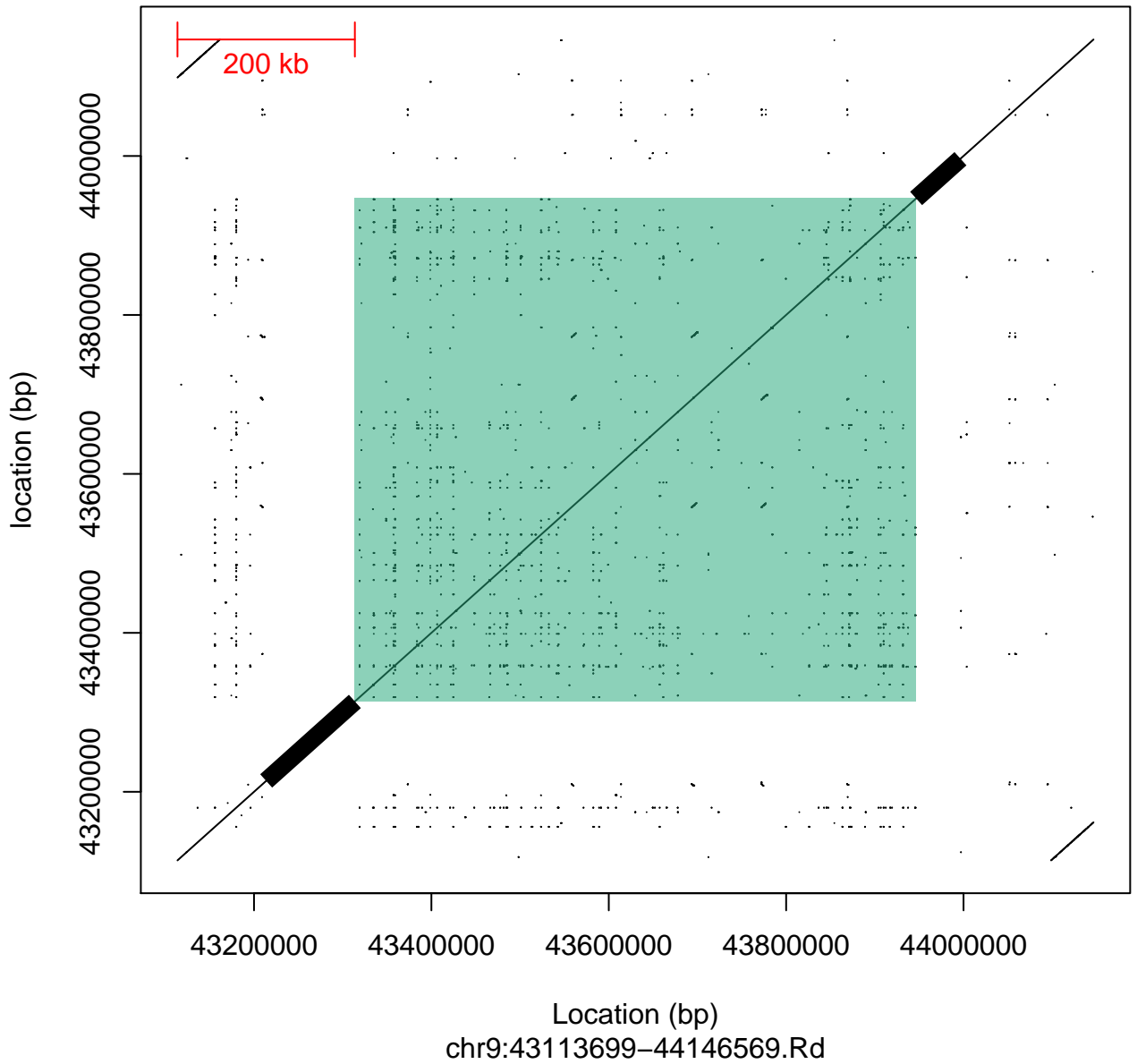
Dotplot of mBM.9.1, fCB.9.1, ROIno.9.3, ROIno.9.4 on chr9



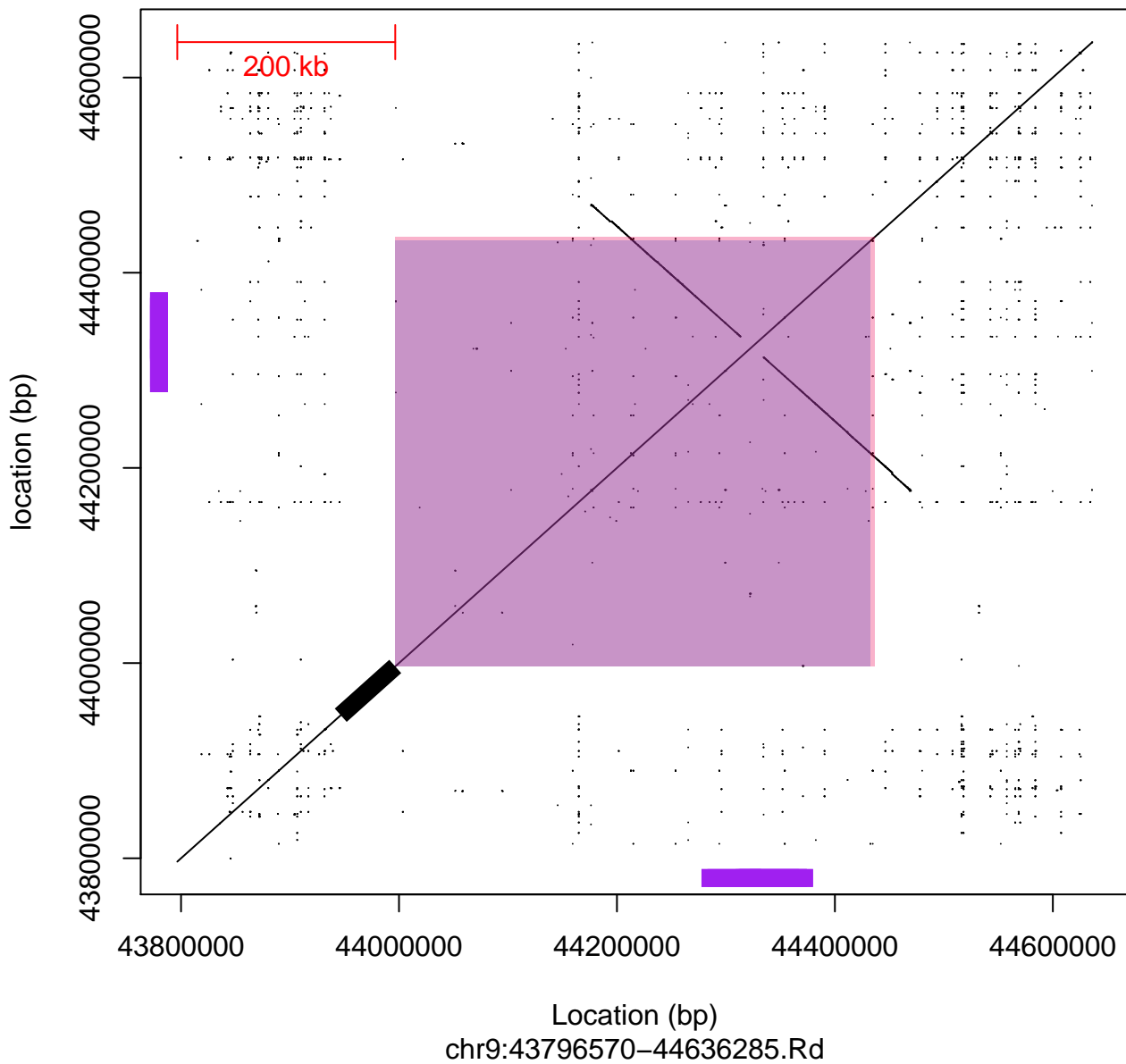
Dotplot of mBM.9.2, ROIno.9.8 on chr9



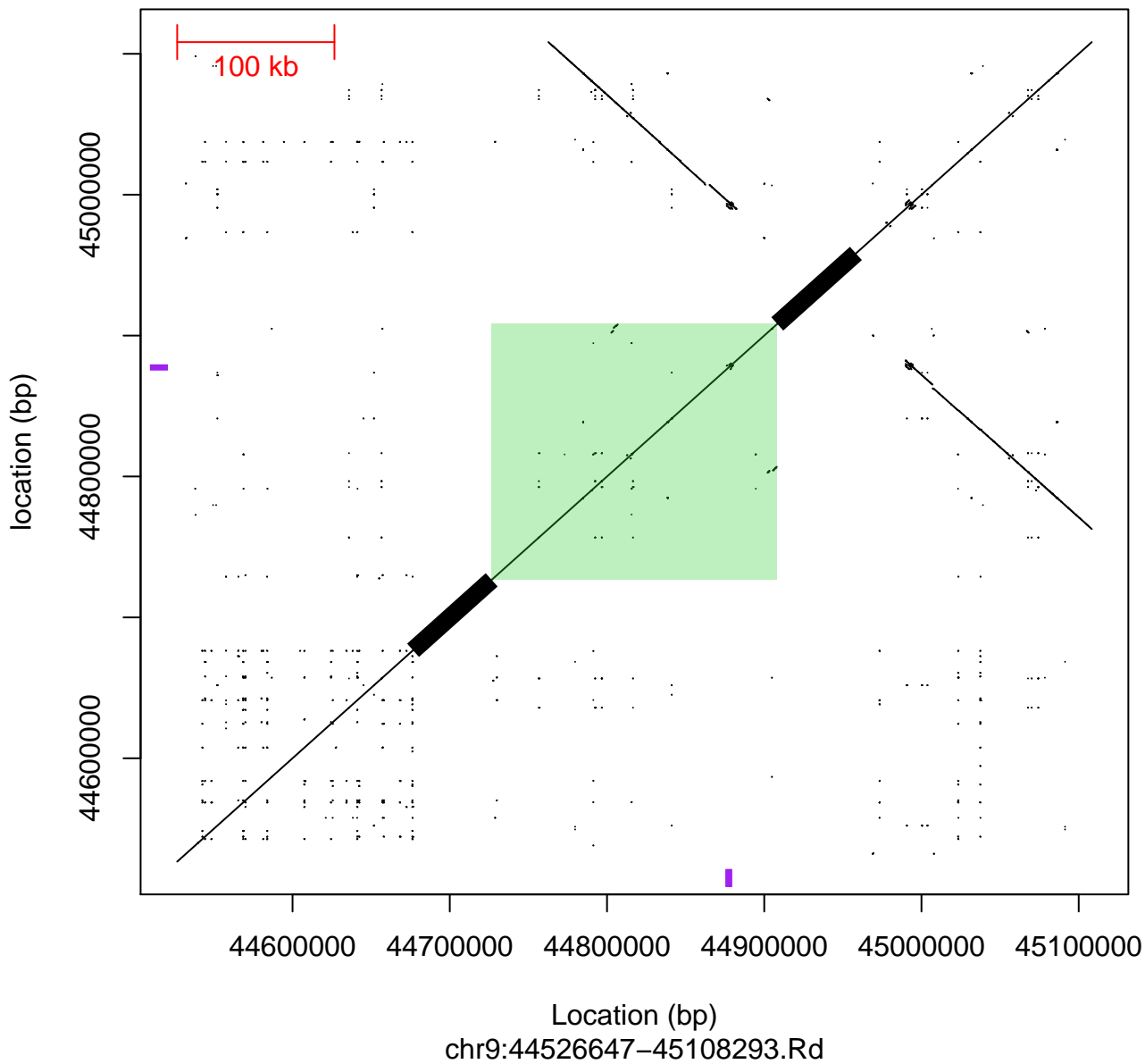
Dotplot of mBM.9.3, ROIno.9.9 on chr9



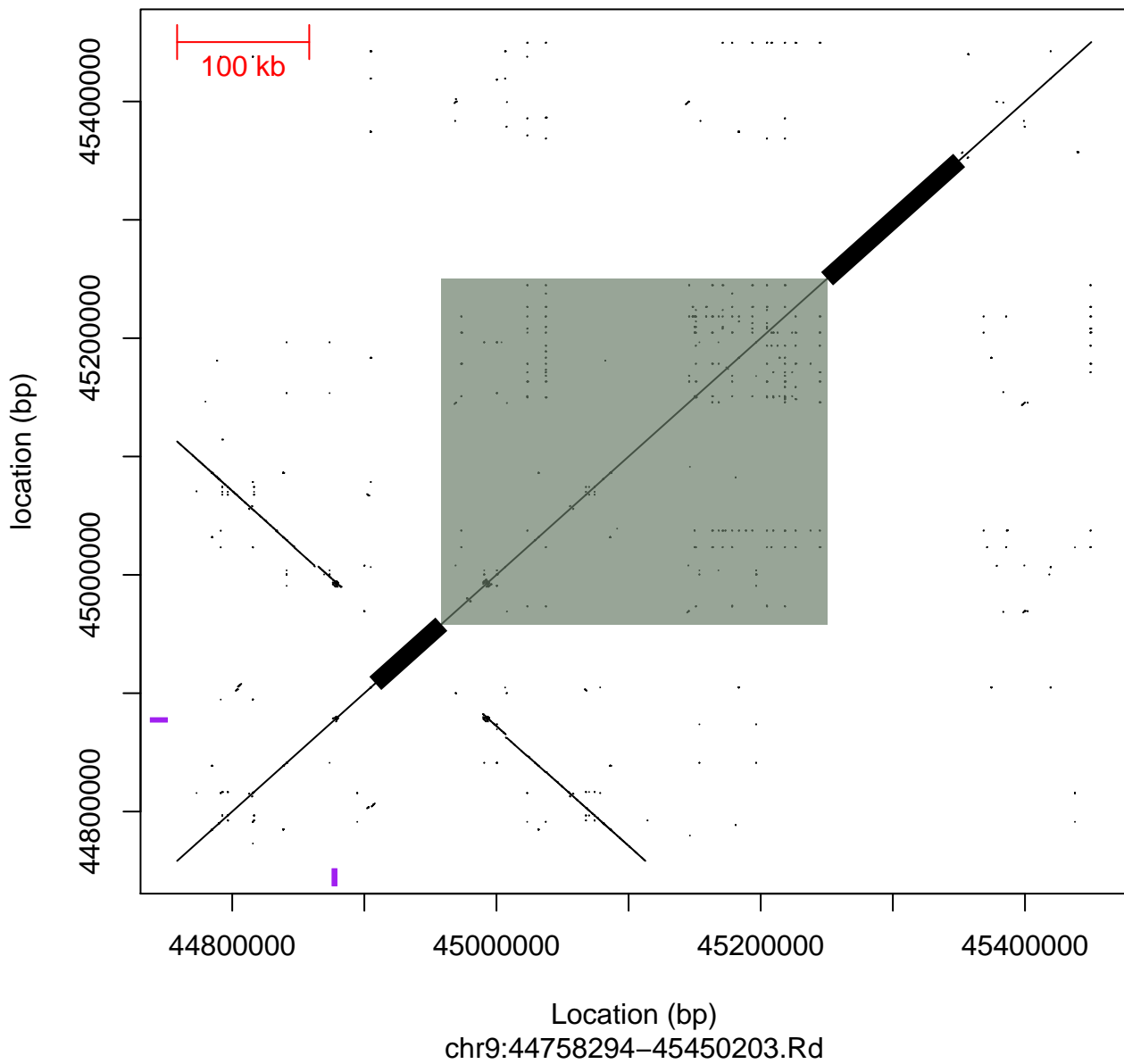
Dotplot of mBM.9.4, fCB.9.2 on chr9



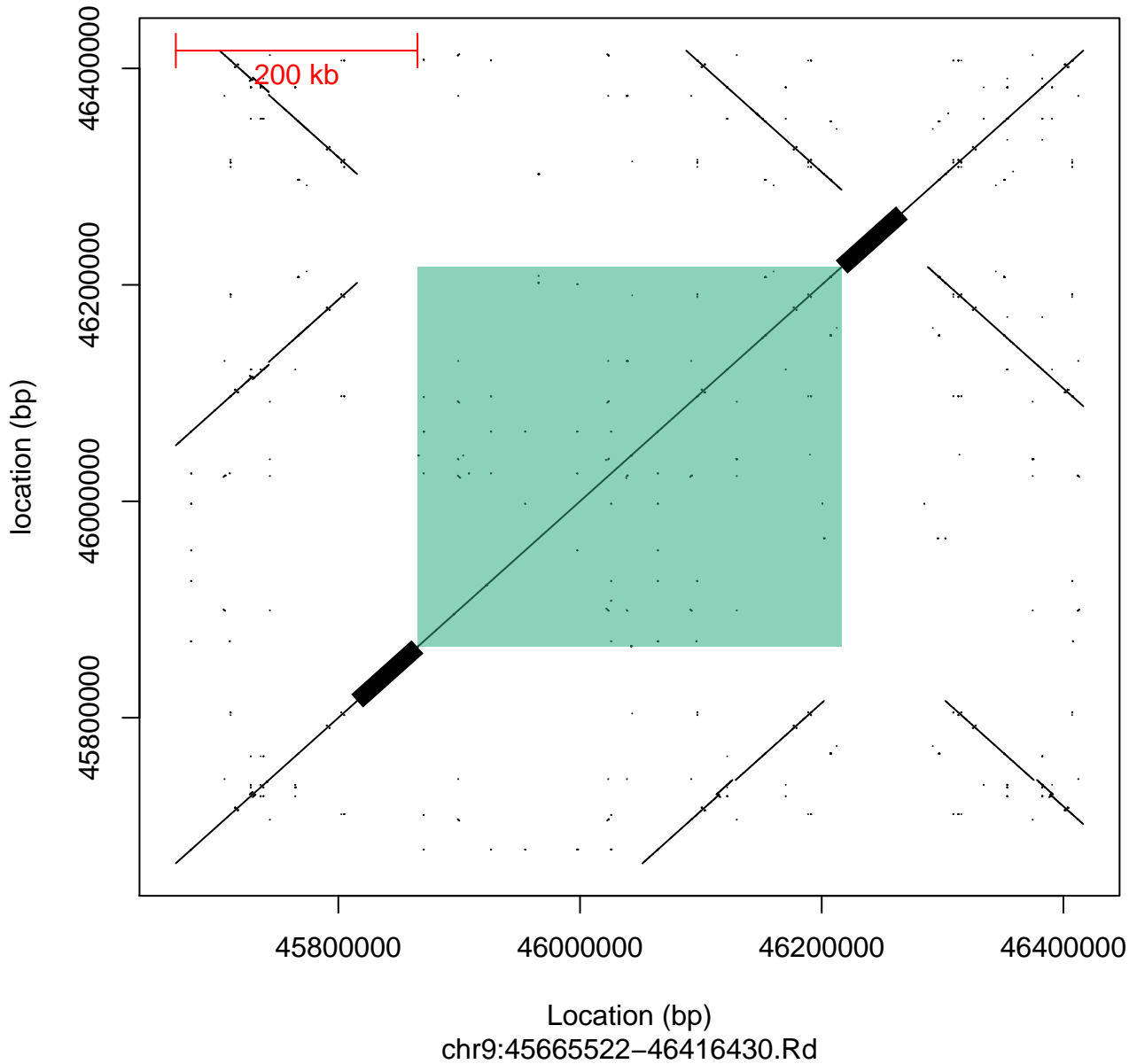
Dotplot of ROIno.9.11 on chr9



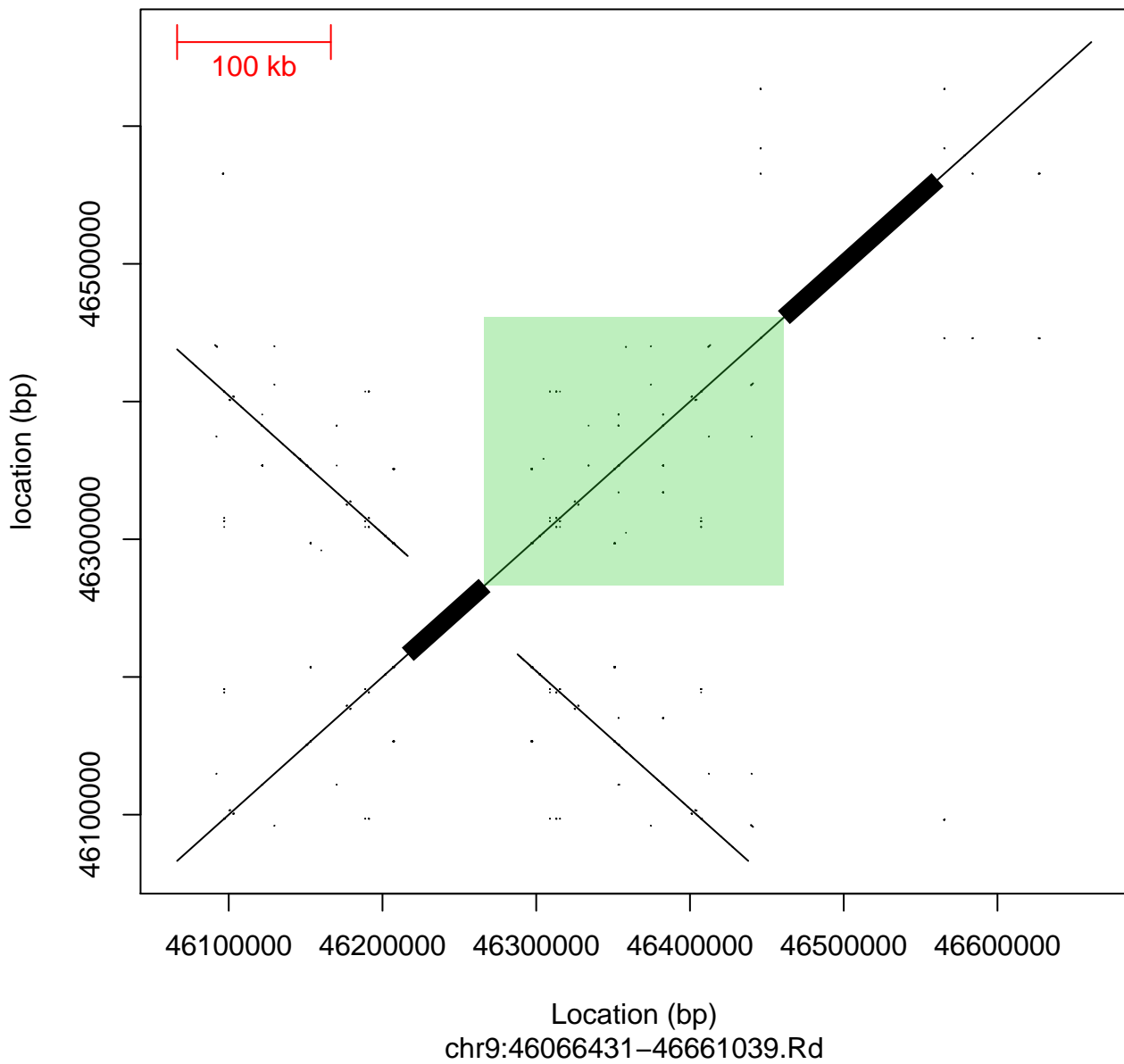
Dotplot of mBM.9.5, fCB.9.3, ROIno.9.12 on chr9



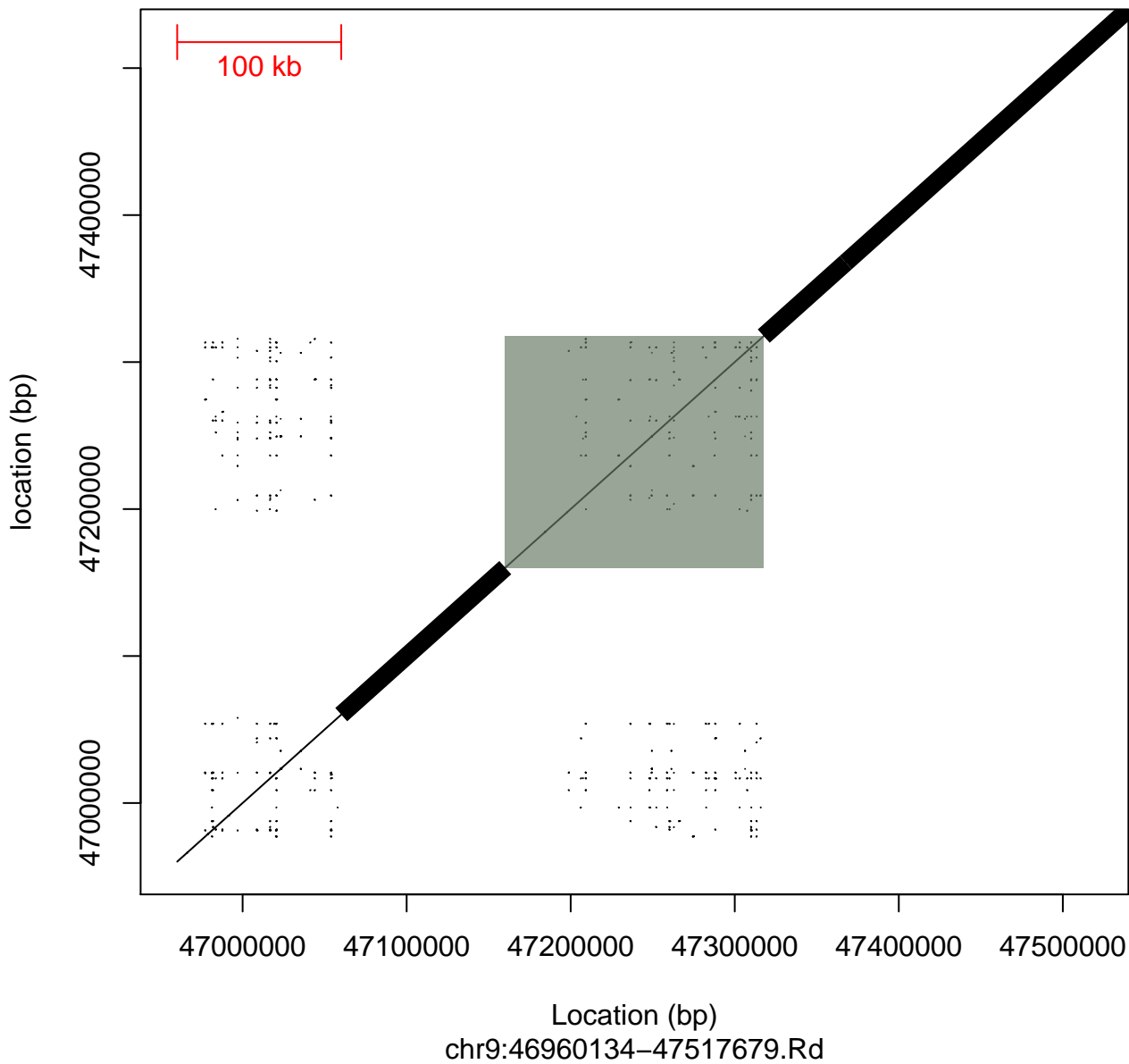
Dotplot of mBM.9.6, ROIno.9.14 on chr9



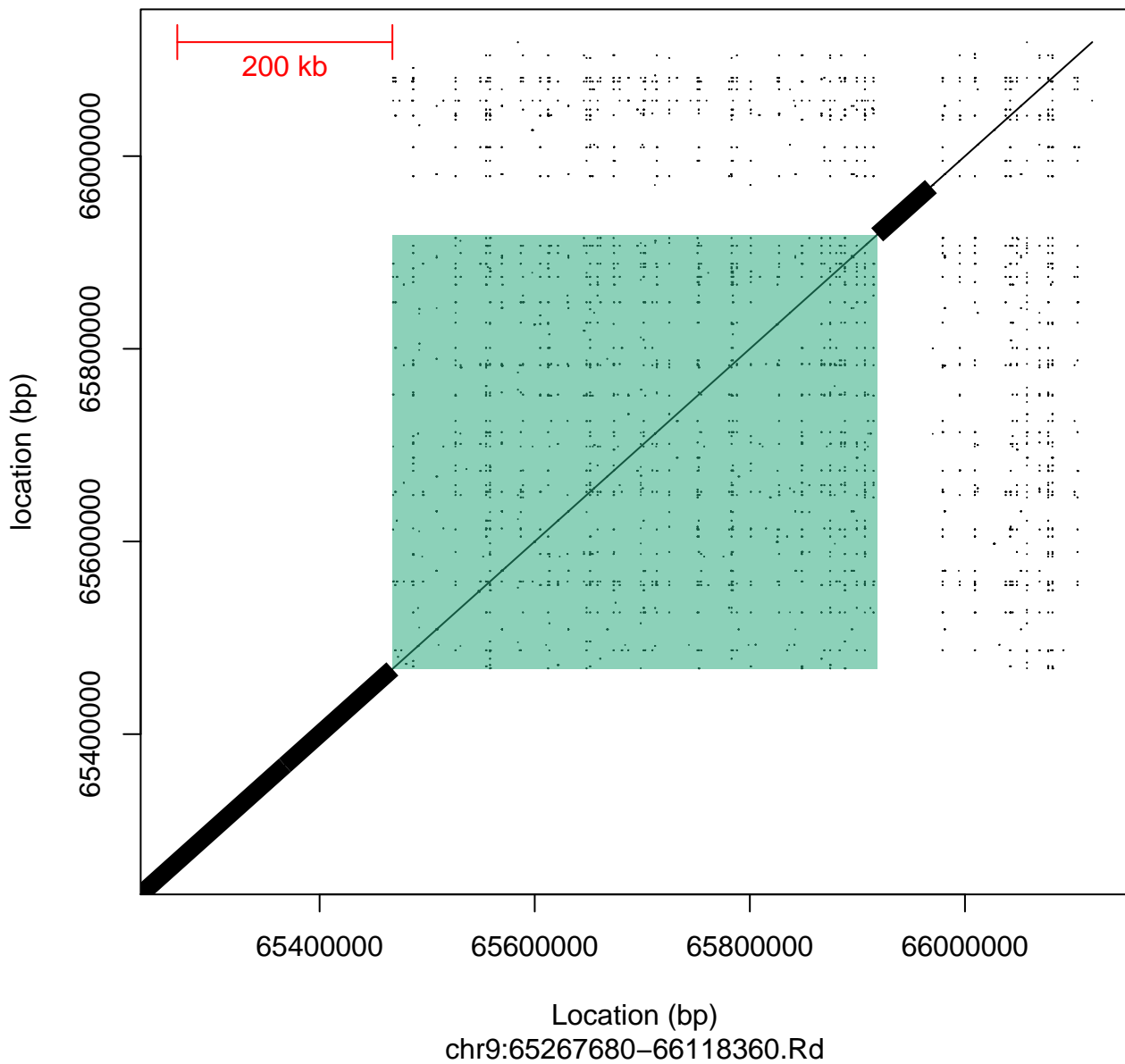
Dotplot of ROIno.9.15 on chr9



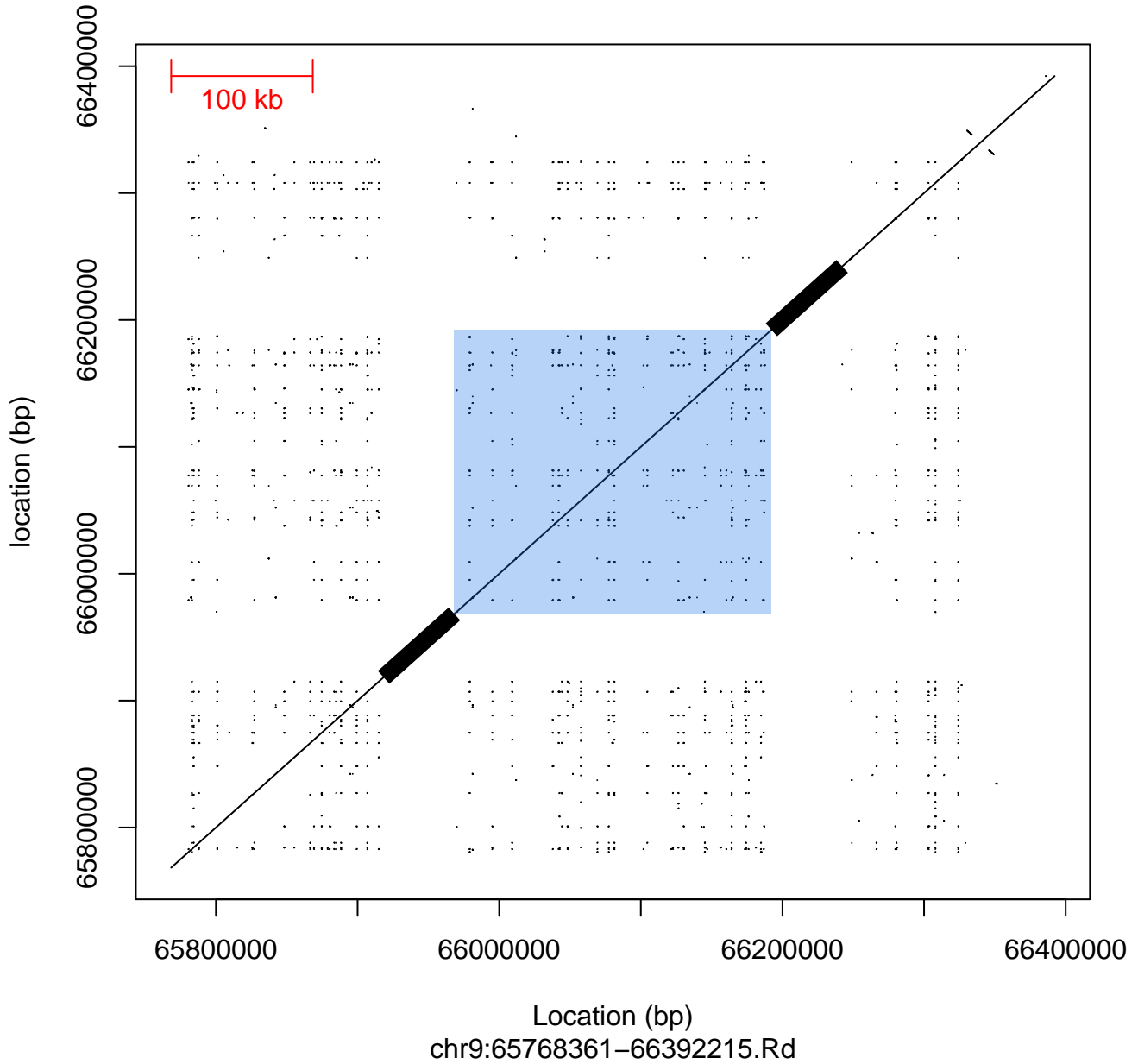
Dotplot of mBM.9.7, fCB.9.4, ROIno.9.17 on chr9



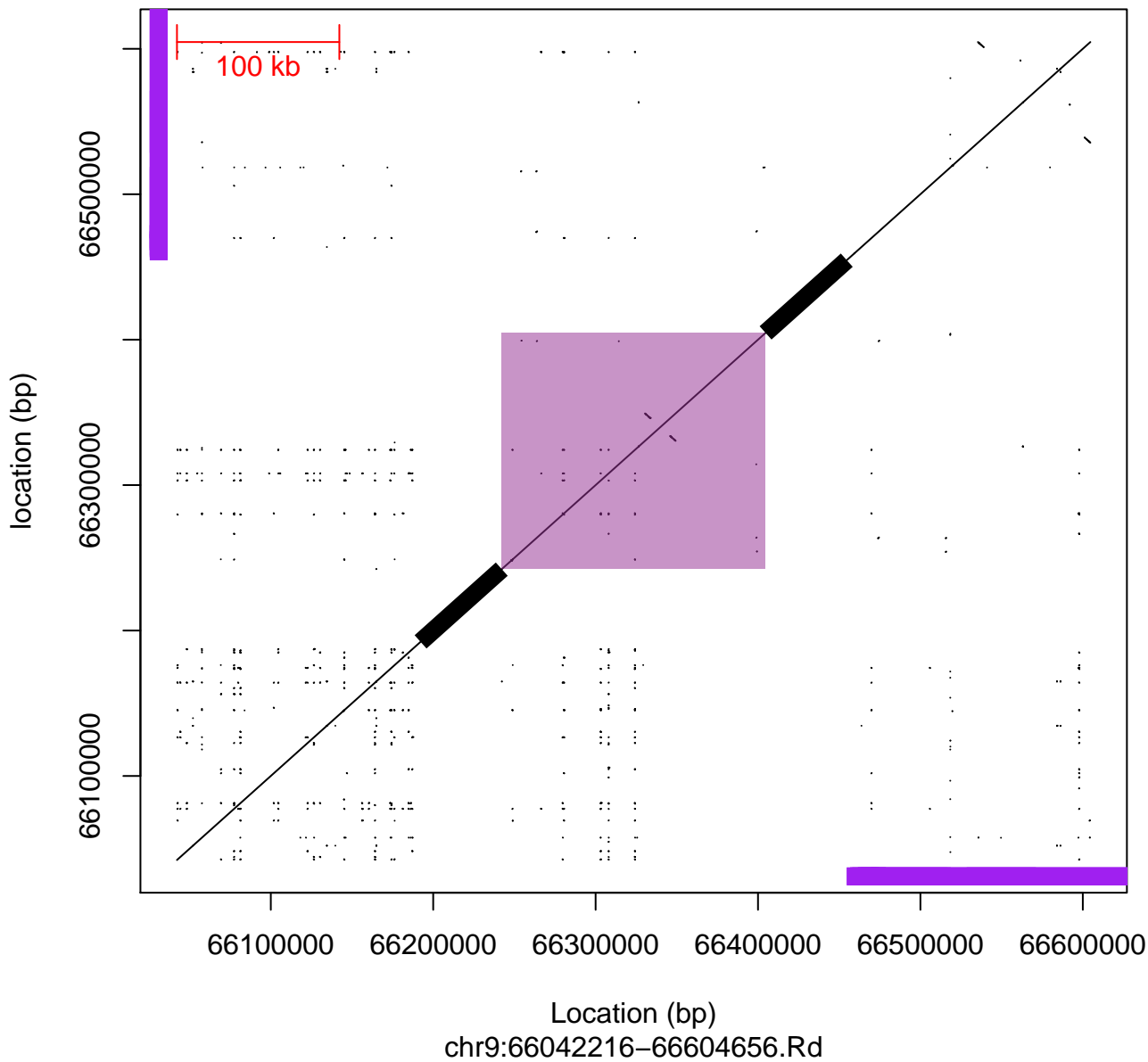
Dotplot of mBM.9.8, ROIno.9.18 on chr9



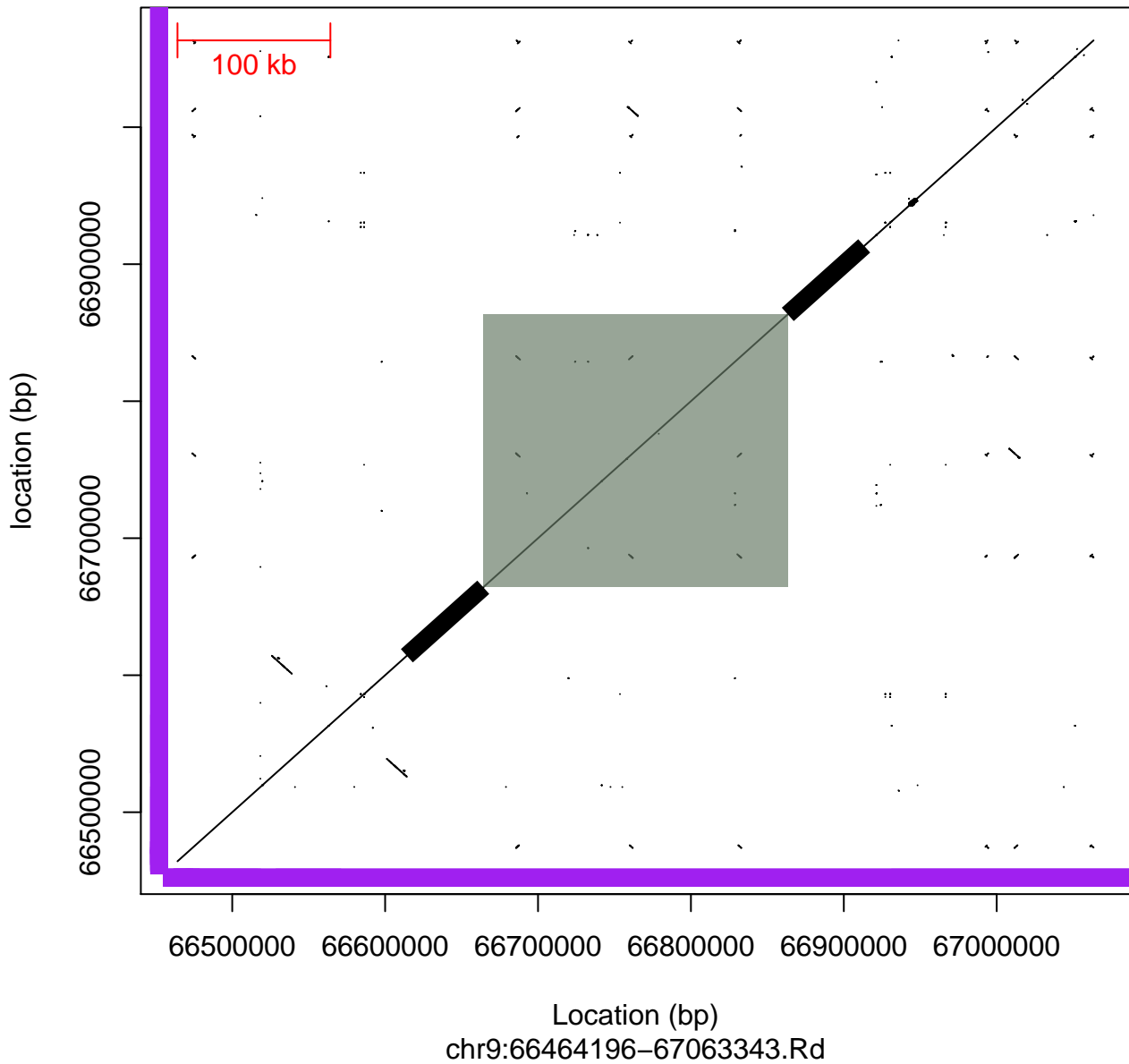
Dotplot of mBM.9.9 on chr9



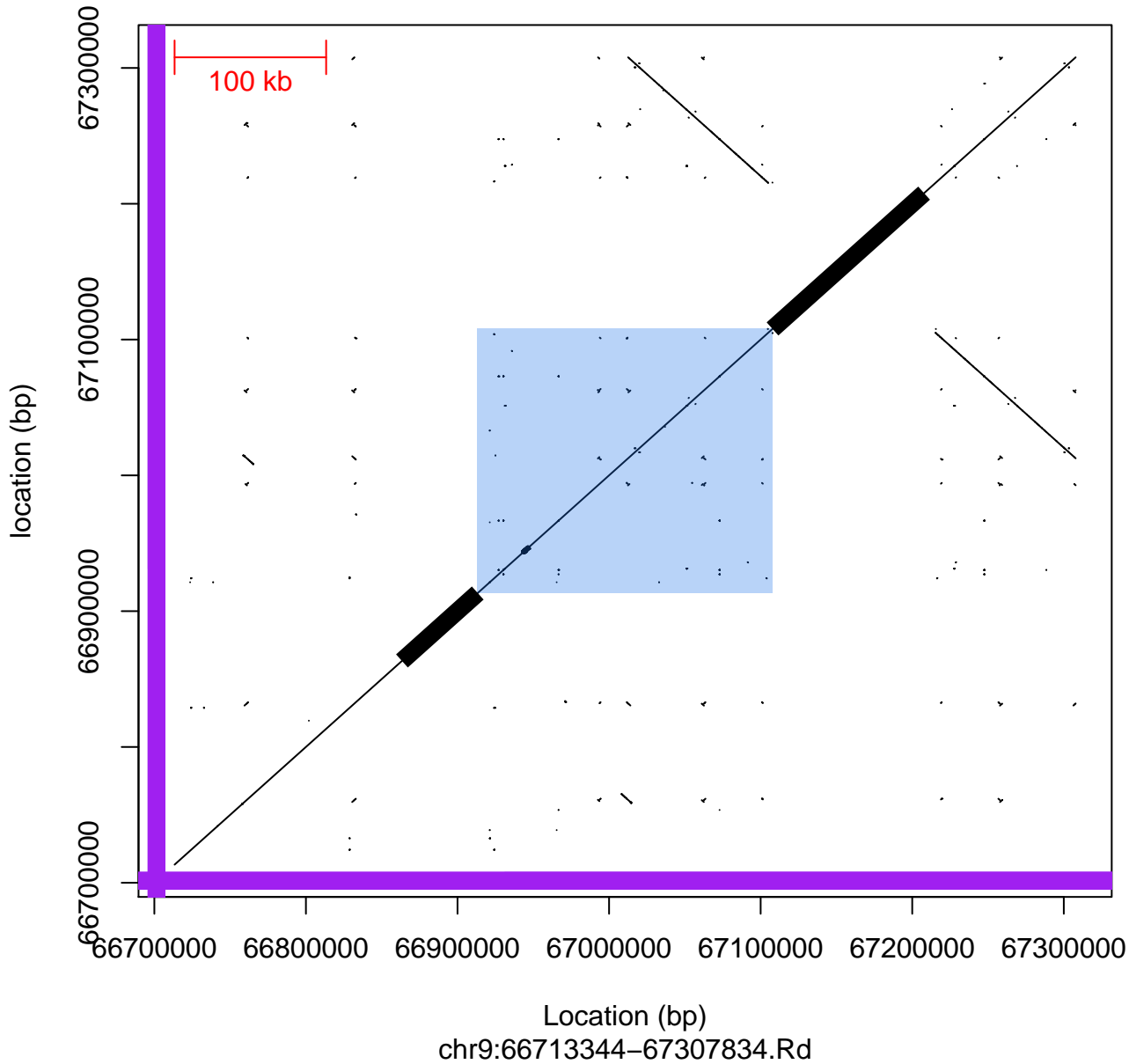
Dotplot of mBM.9.10, fCB.9.5 on chr9



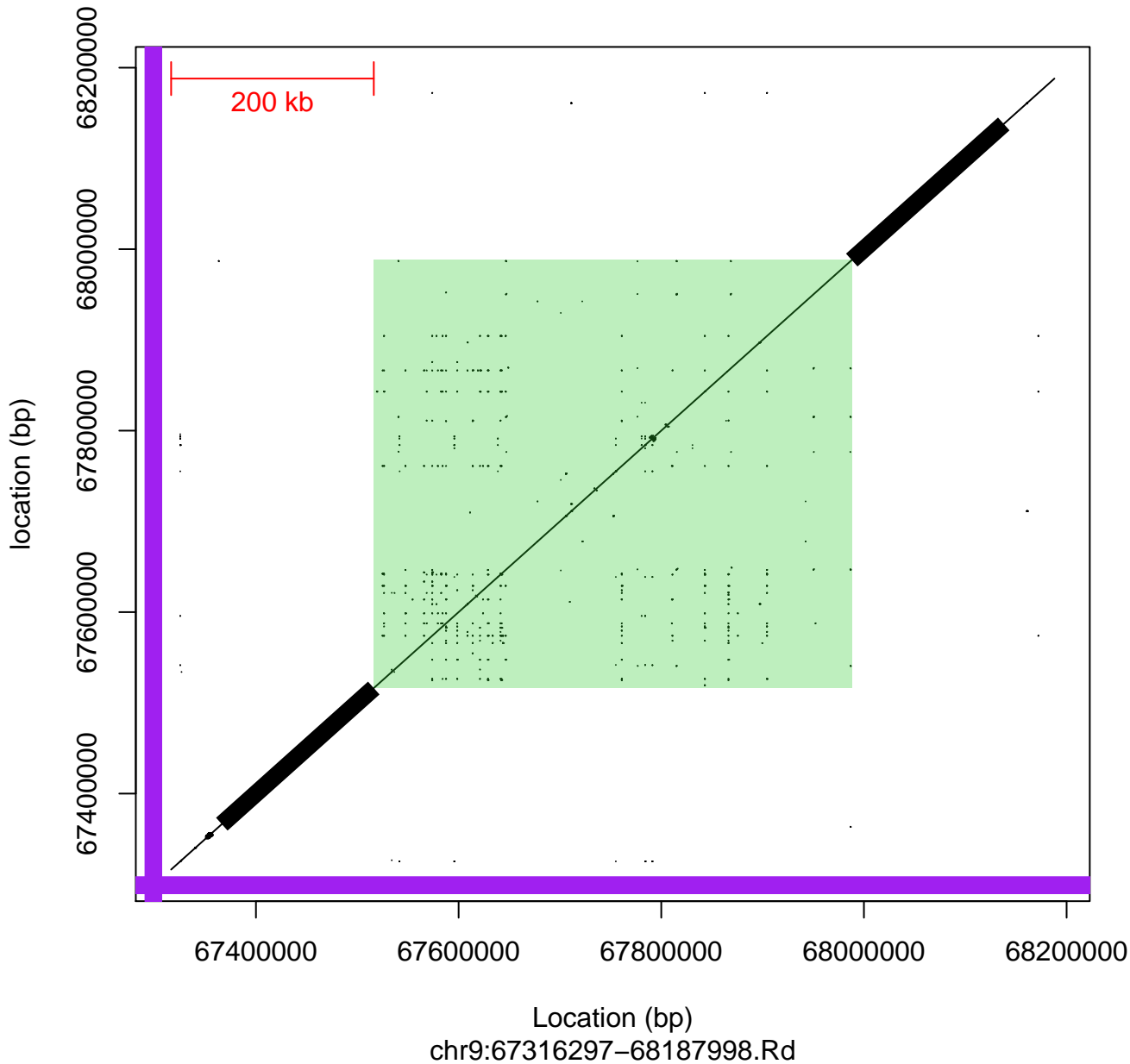
Dotplot of mBM.9.11, fCB.9.6, ROIno.9.22 on chr9



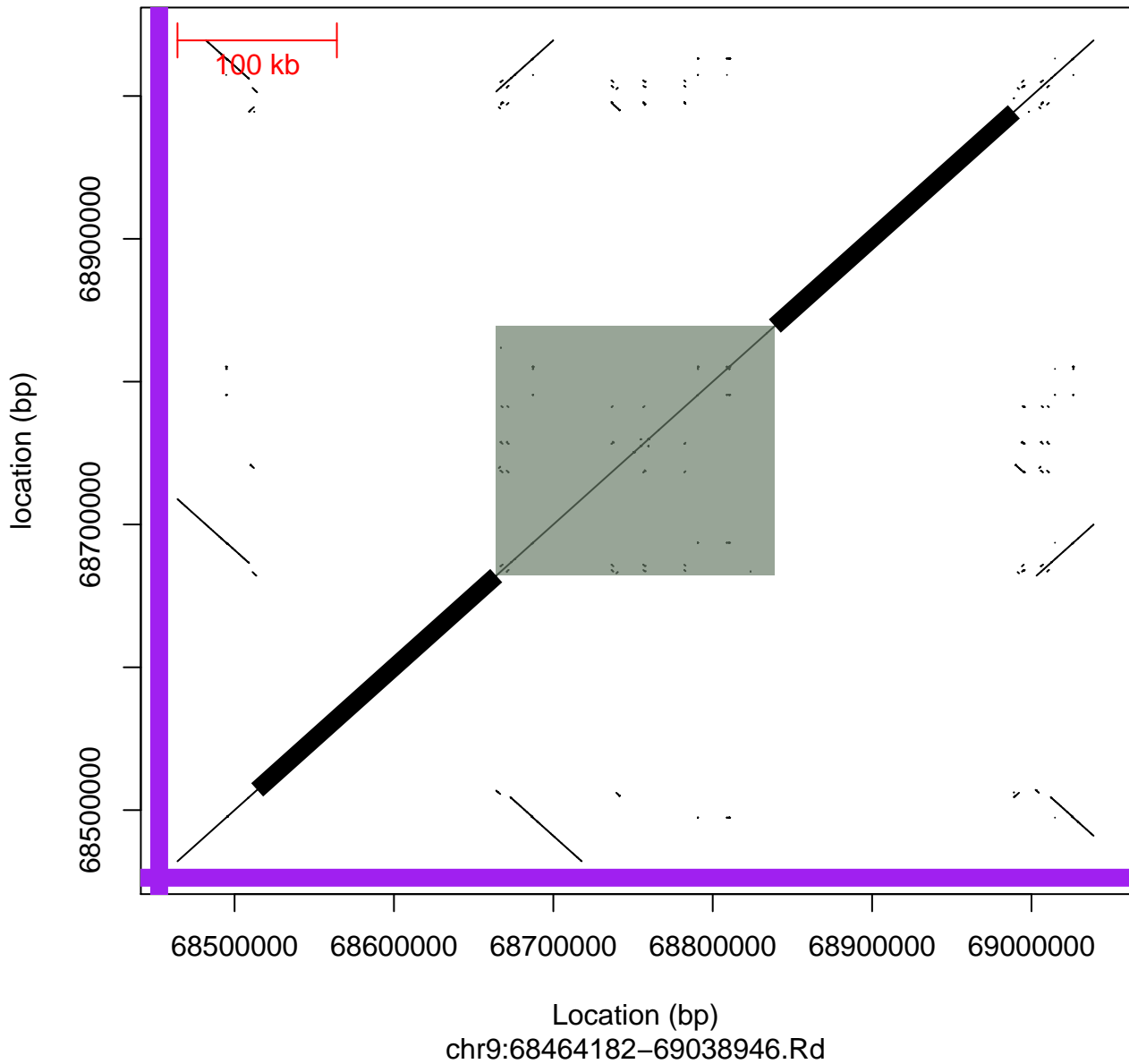
Dotplot of mBM.9.12 on chr9



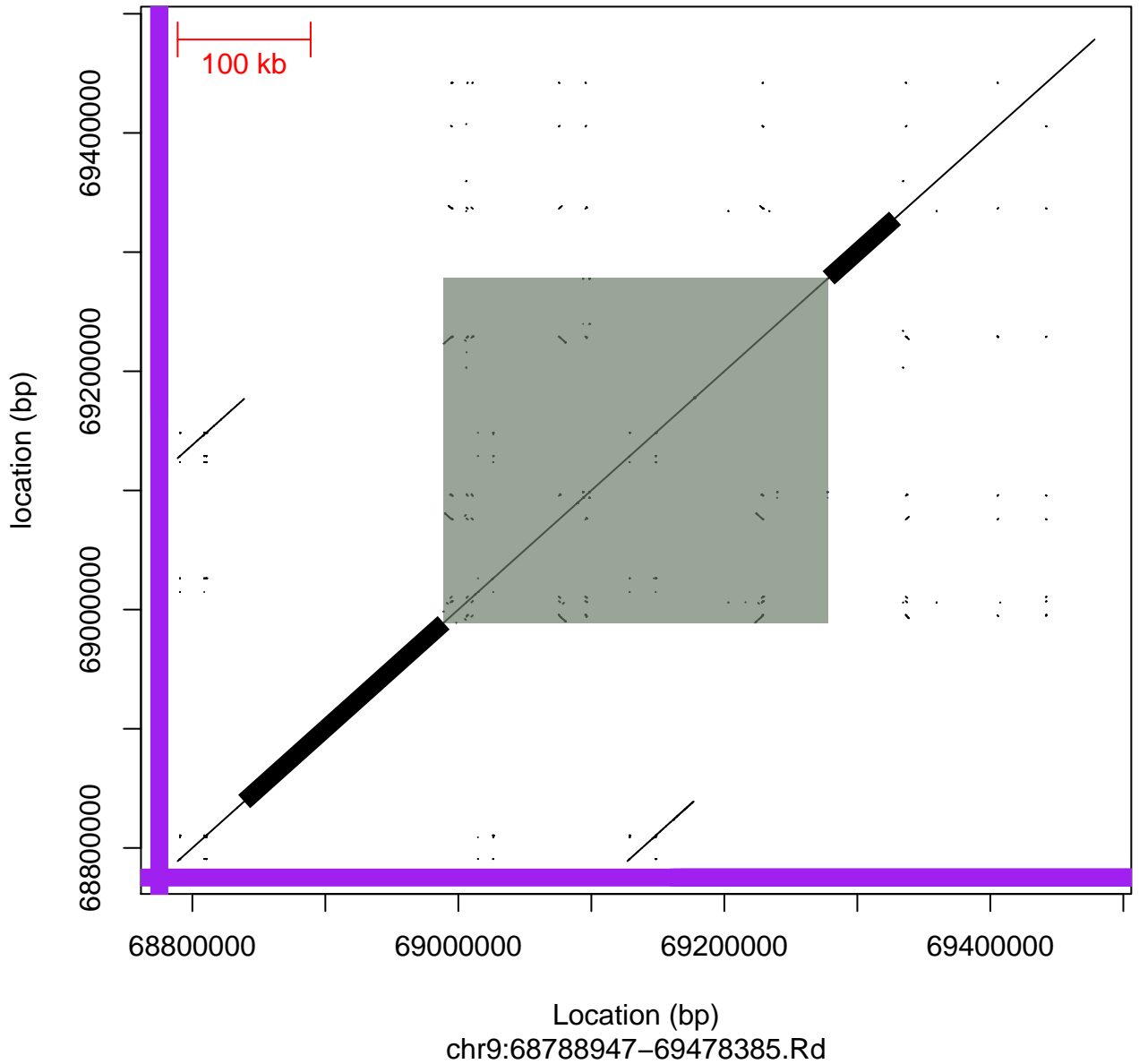
Dotplot of ROIno.9.25 on chr9



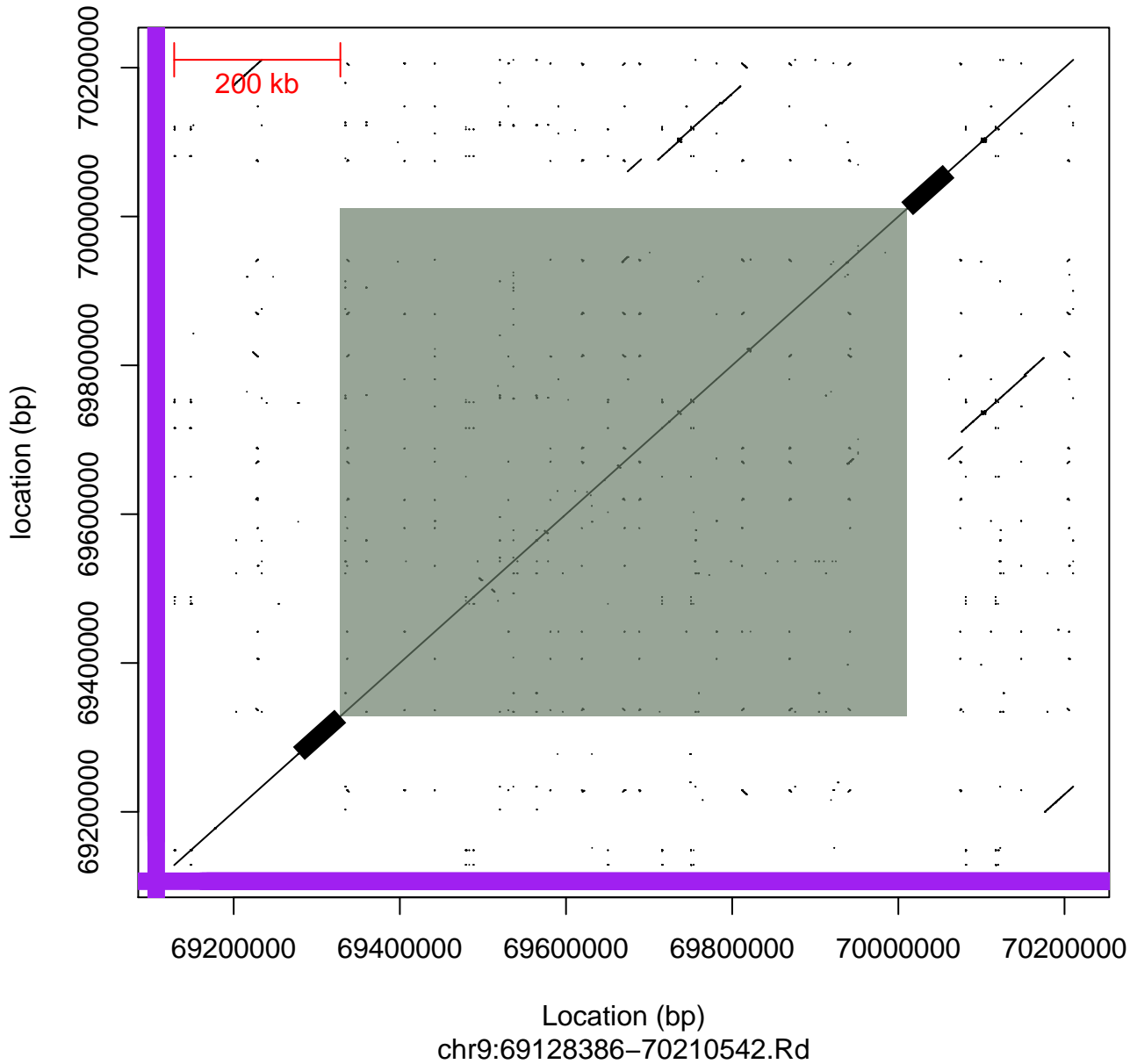
Dotplot of mBM.9.13, fCB.9.7, ROIno.9.27 on chr9



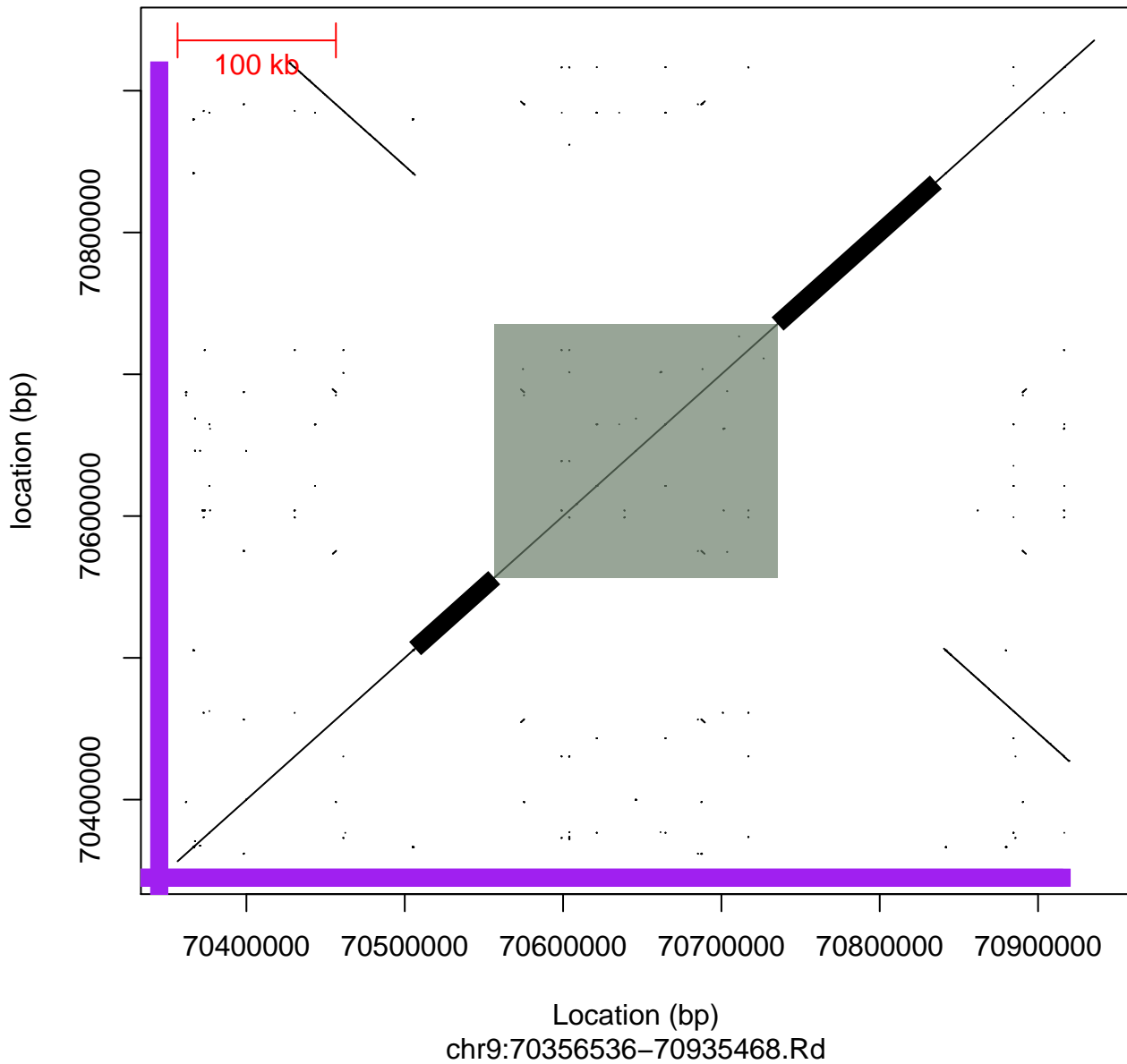
Dotplot of mBM.9.14, fCB.9.8, ROIno.9.28 on chr9



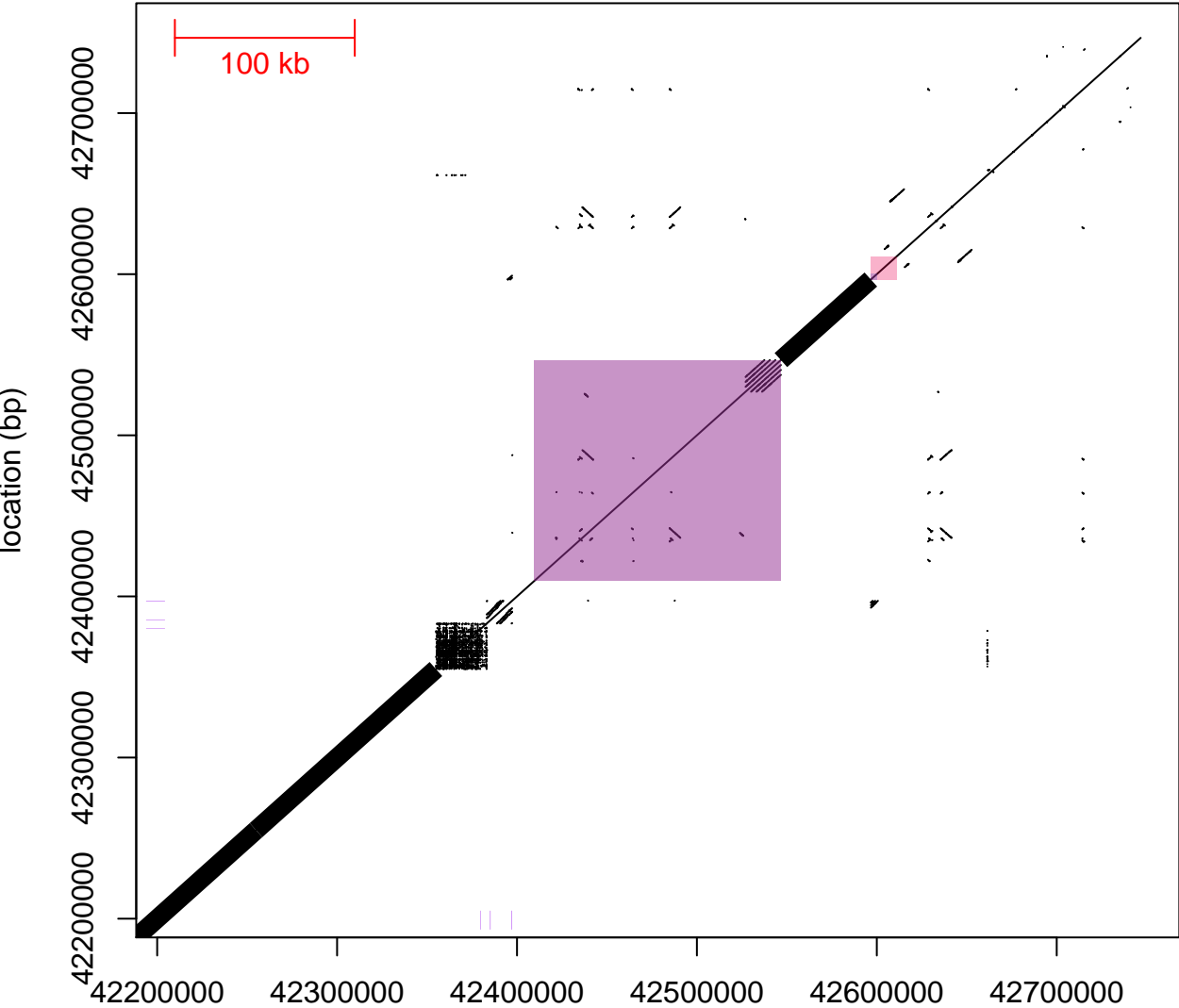
Dotplot of mBM.9.15, fCB.9.9, ROIno.9.29 on chr9



Dotplot of mBM.9.16, fCB.9.10, ROIno.9.32 on chr9

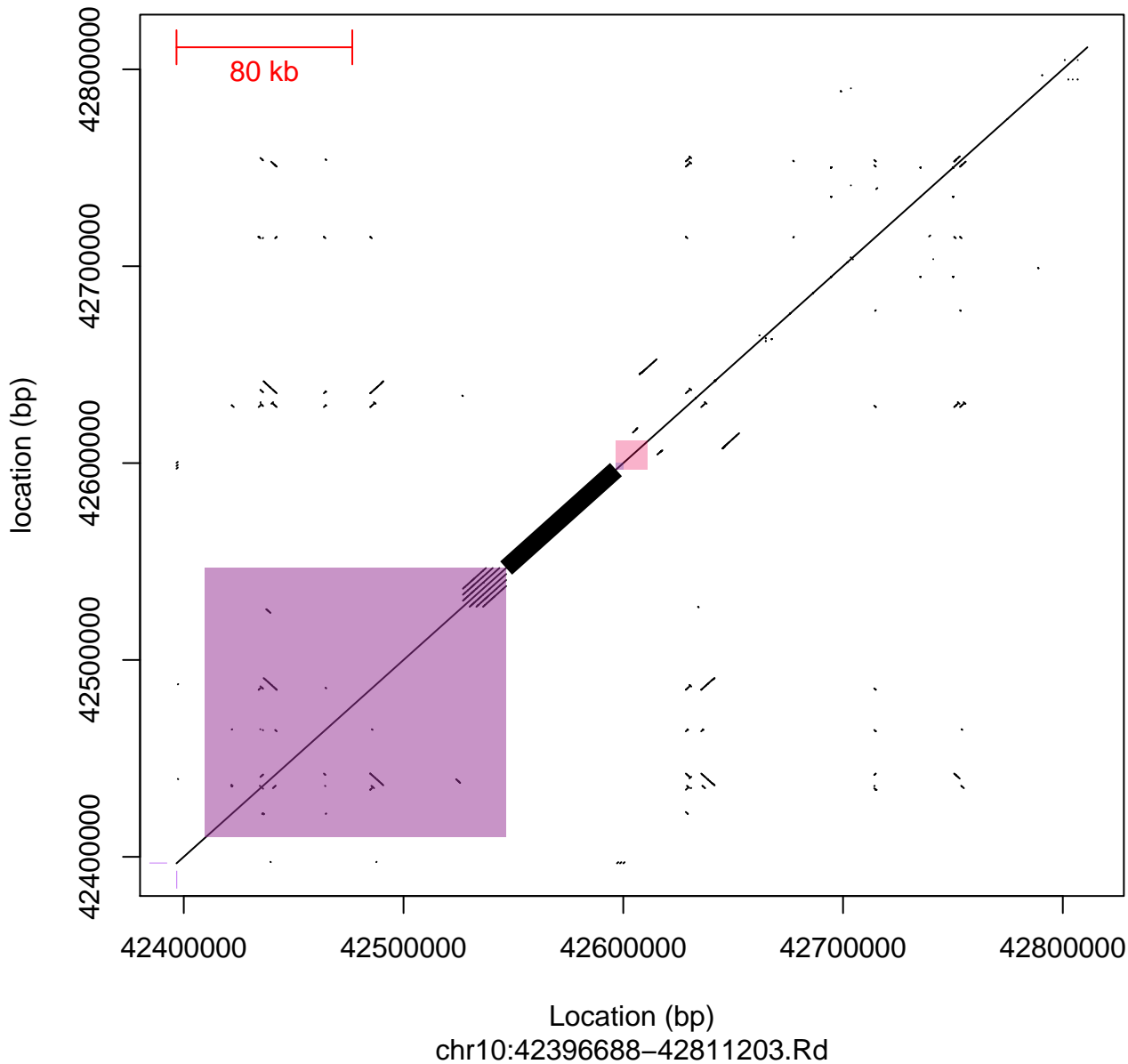


Dotplot of mBM.10.1, mBM.10.2, fCB.10.1, fCB.10.2 on chr10

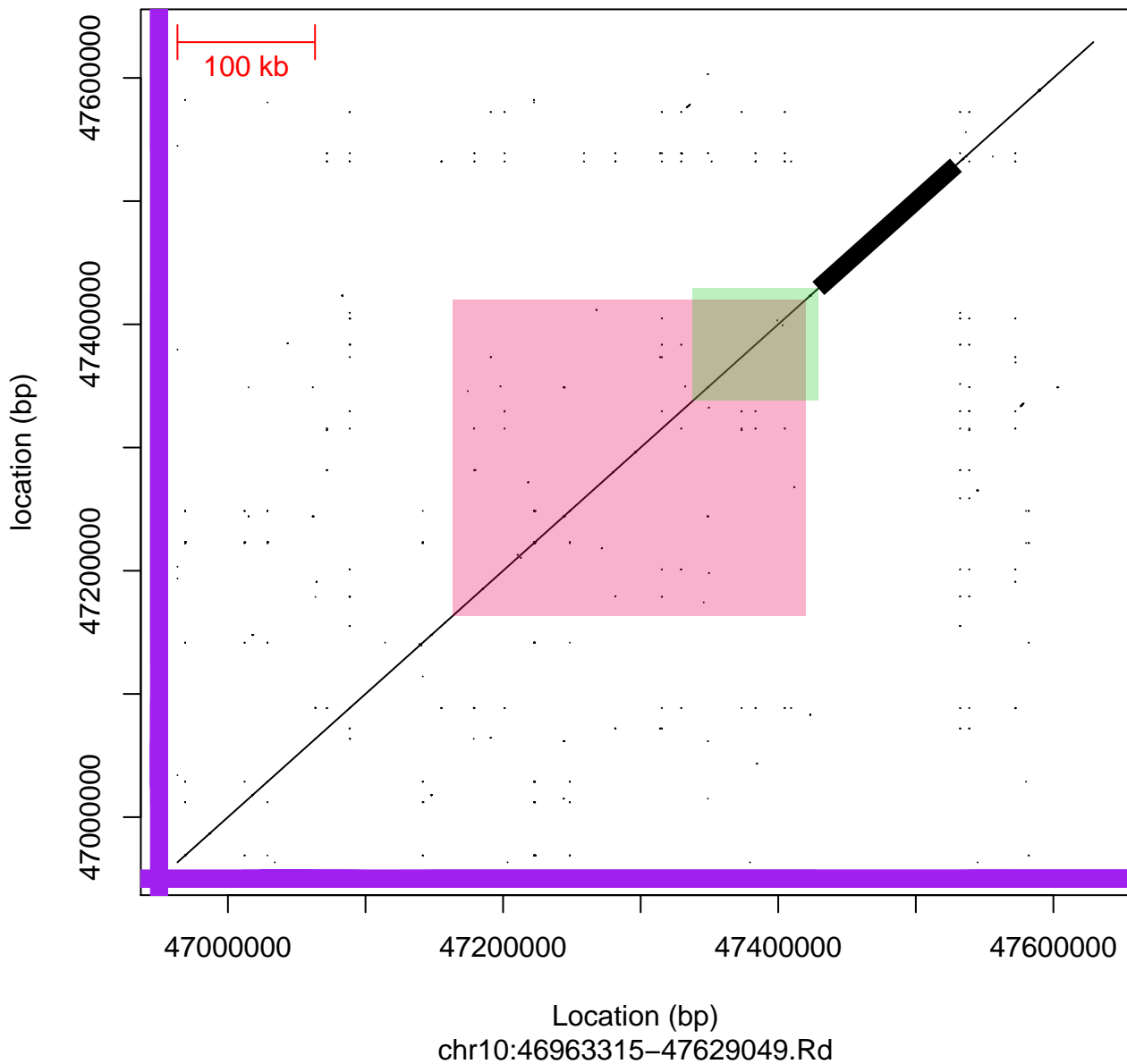


Location (bp)
chr10:42209825–42746687.Rd

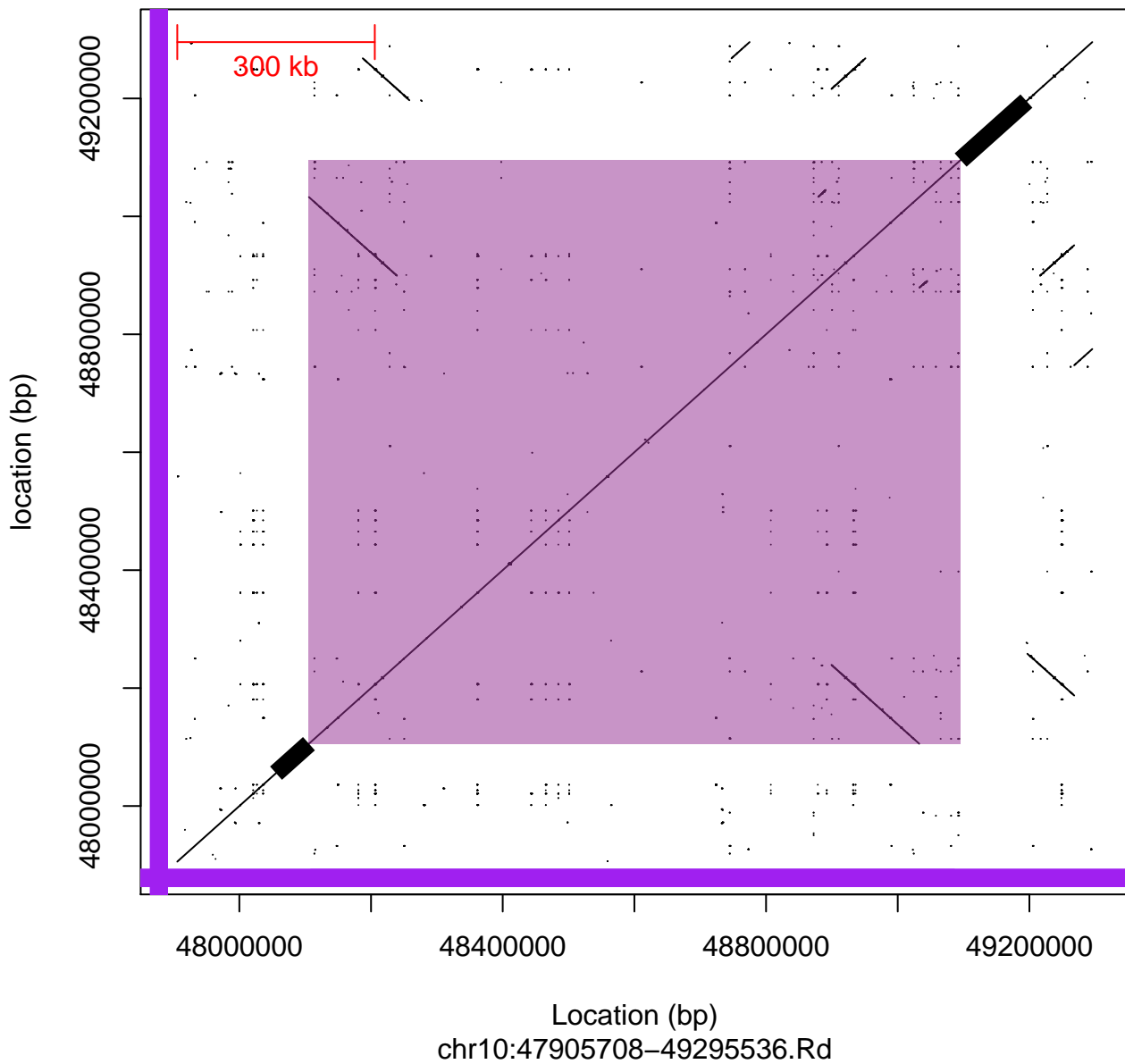
Dotplot of mBM.10.1, mBM.10.2, fCB.10.1, fCB.10.2 on chr10



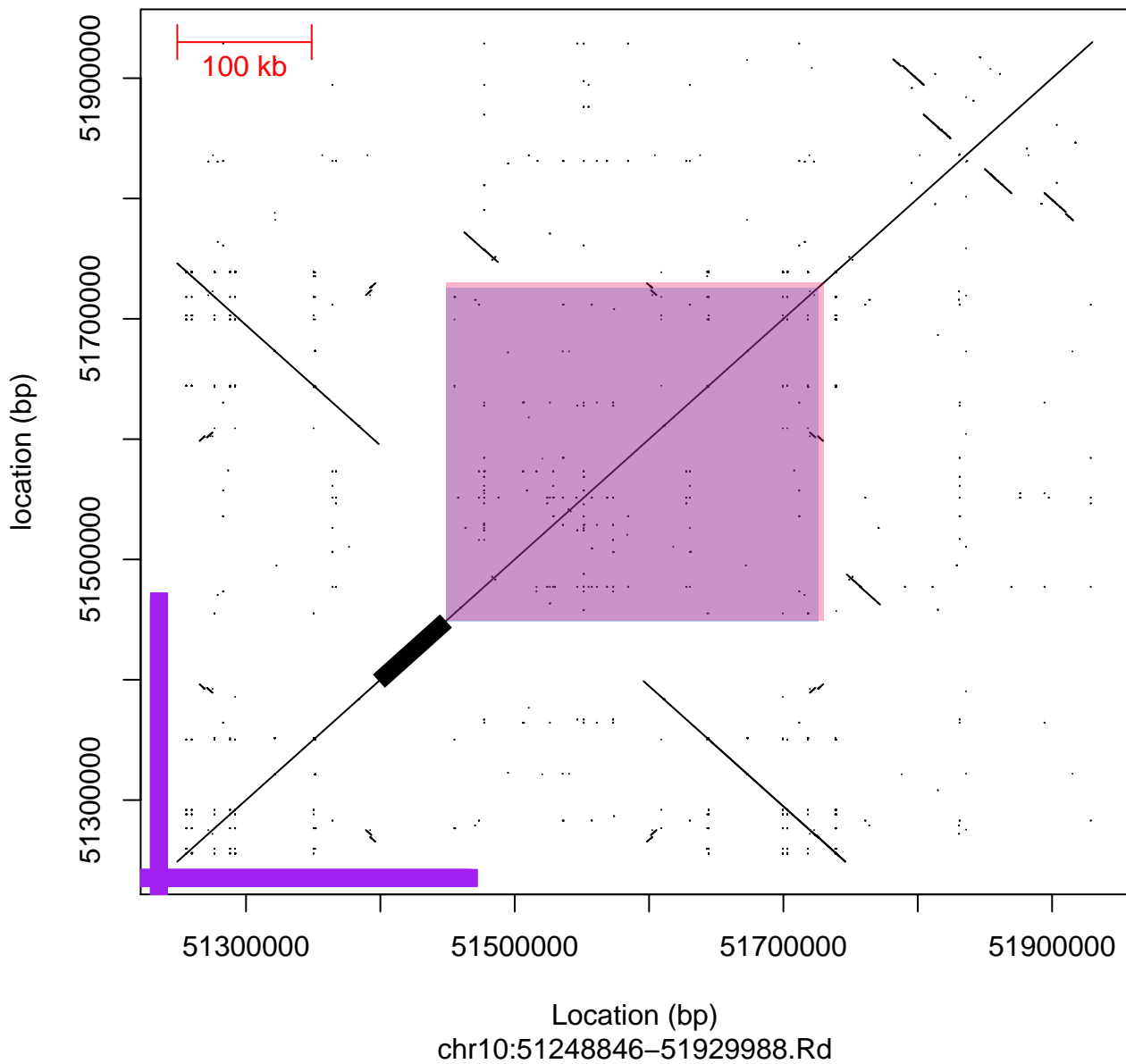
Dotplot of fCB.10.3, ROIno.10.8 on chr10



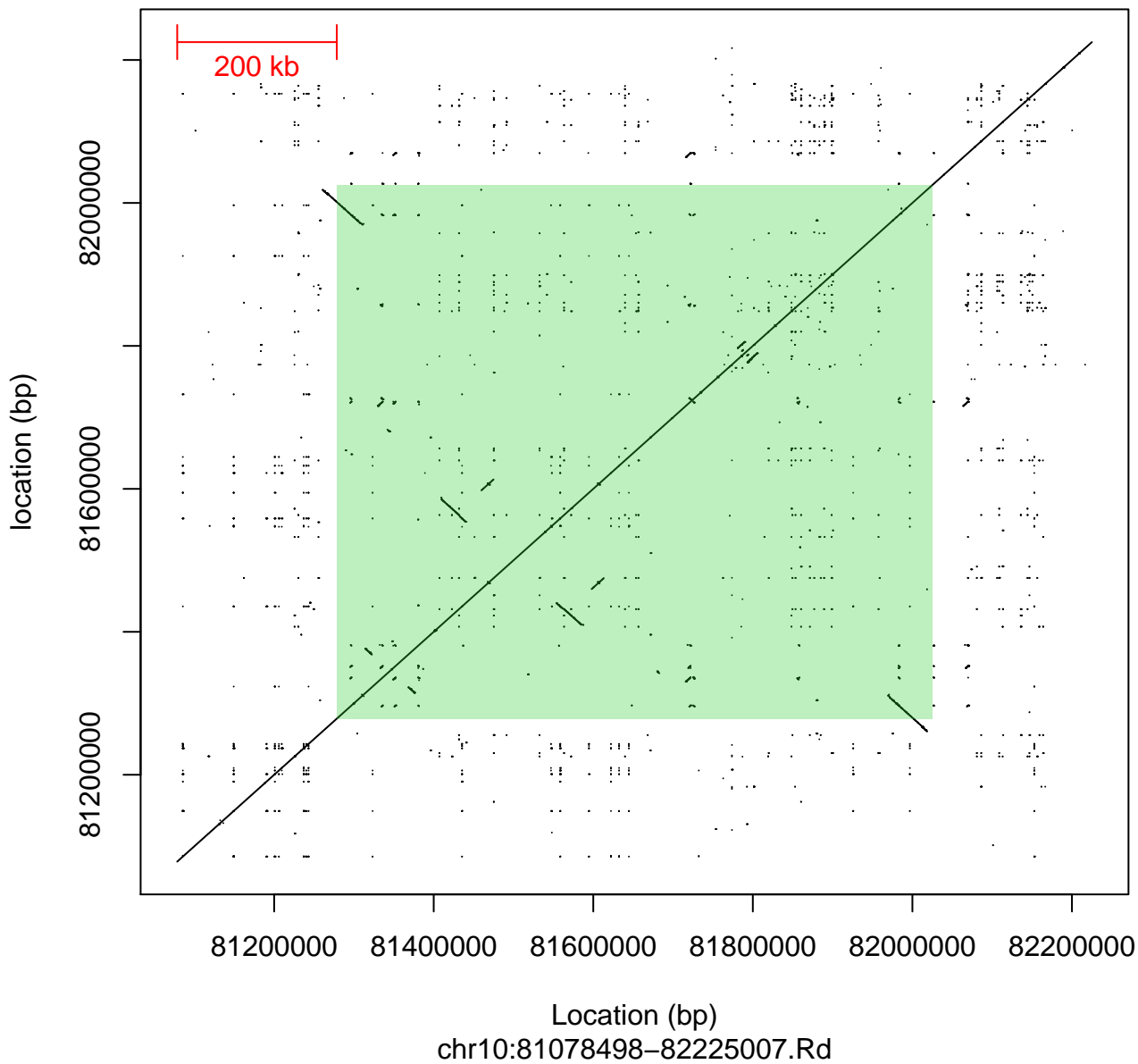
Dotplot of mBM.10.3, fCB.10.4 on chr10



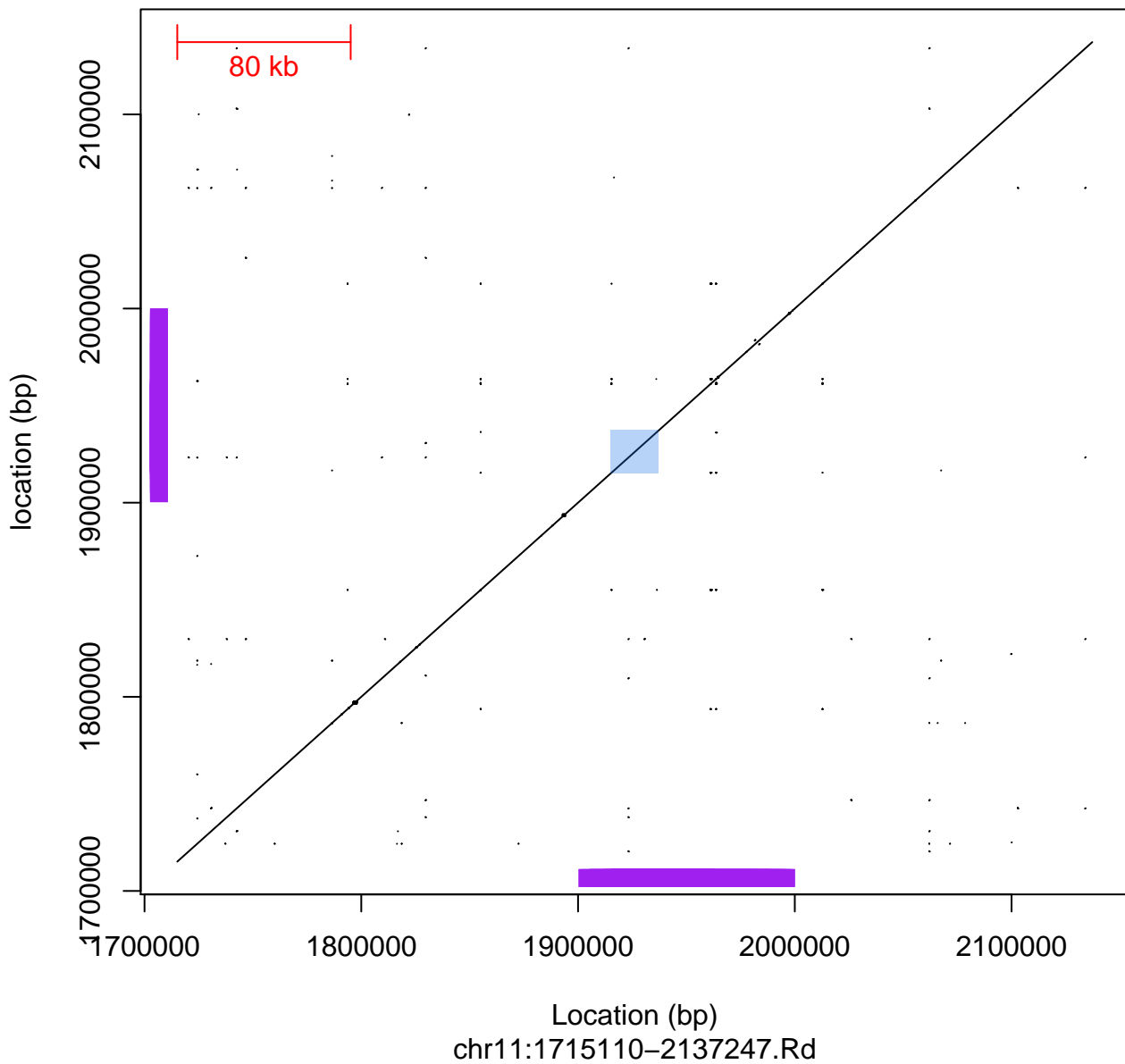
Dotplot of mBM.10.4, fCB.10.5 on chr10



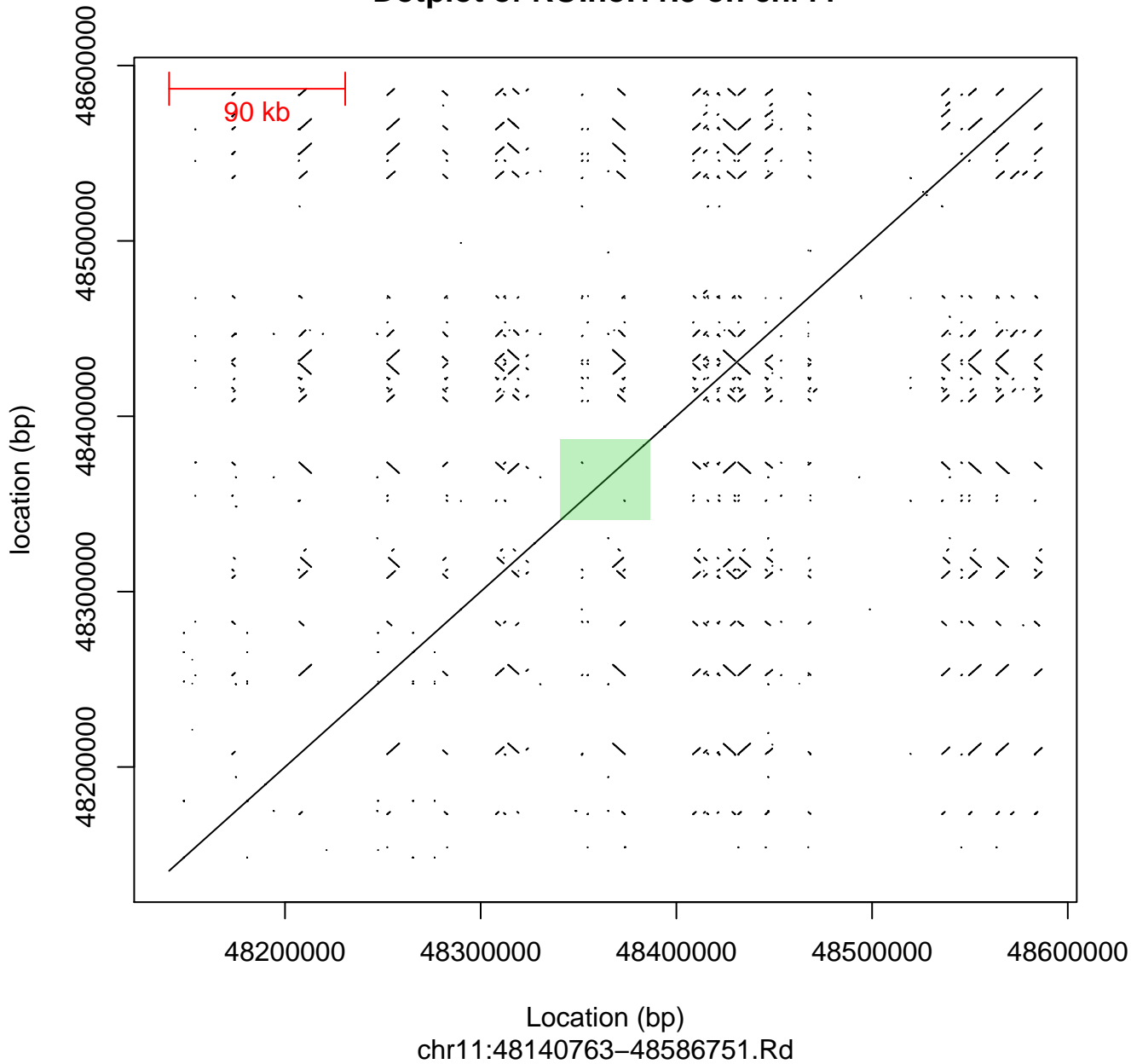
Dotplot of ROIno.10.11 on chr10



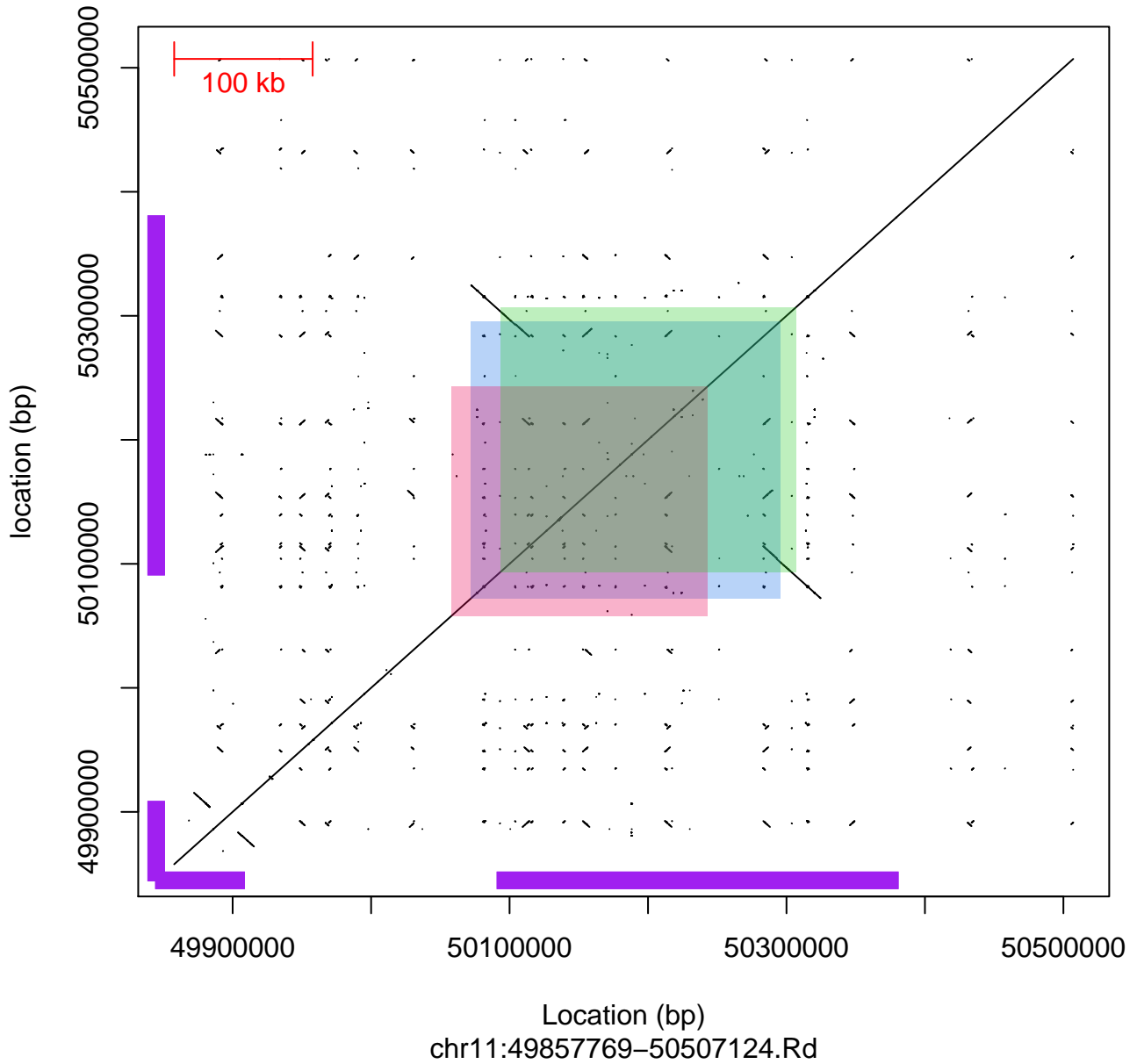
Dotplot of mBM.11.1 on chr11



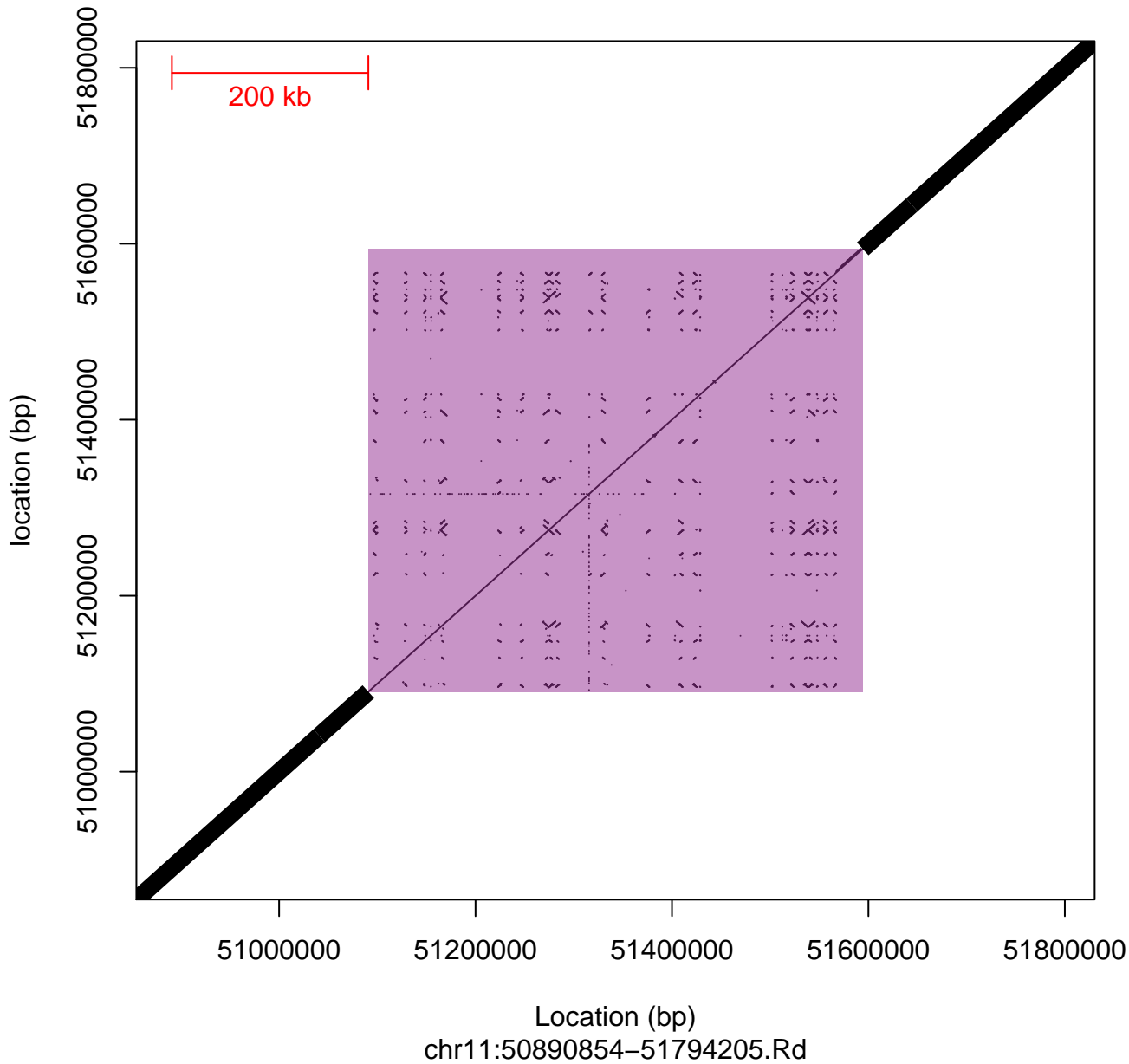
Dotplot of ROI No.11.3 on chr11



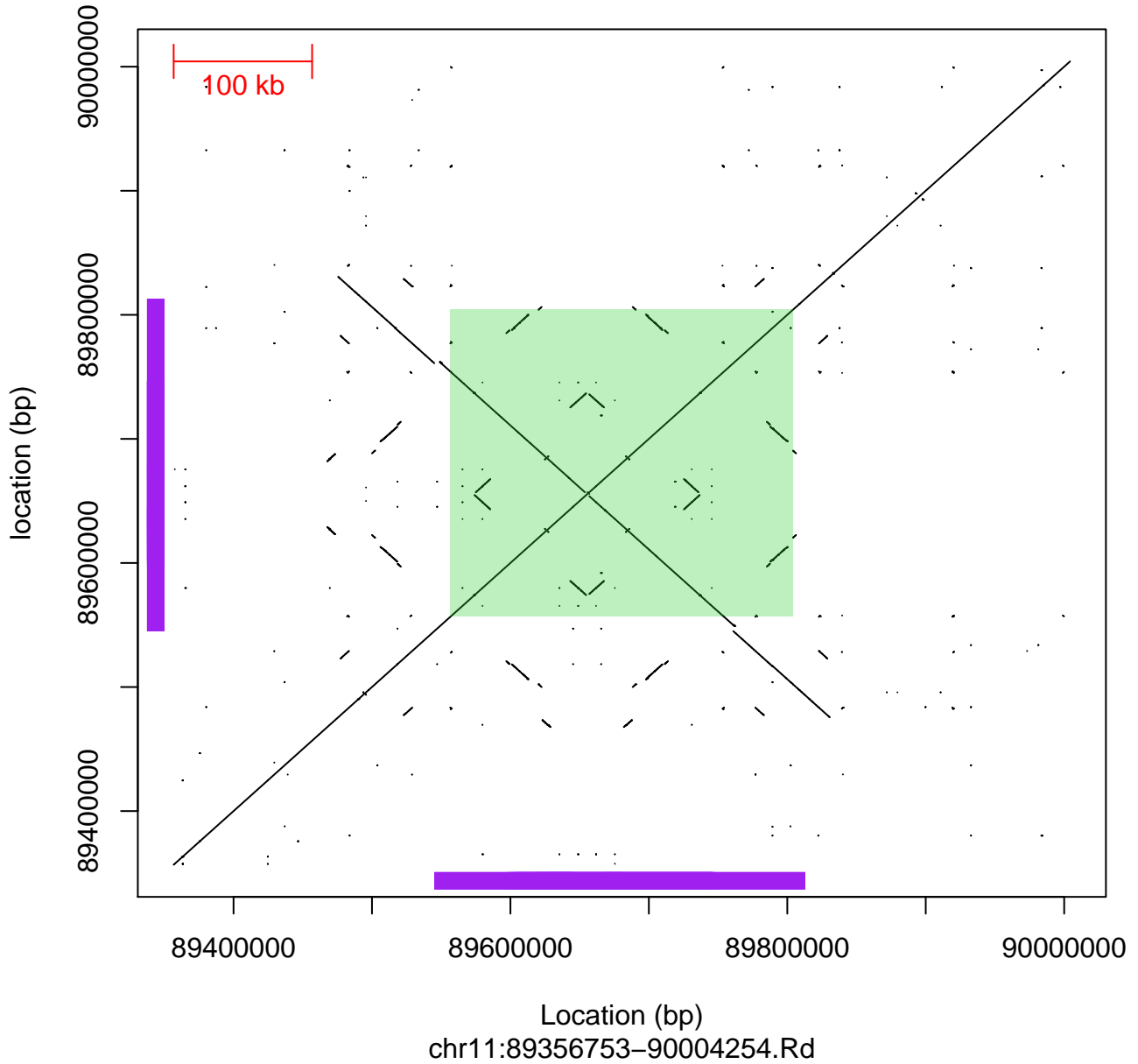
Dotplot of mBM.11.2, fCB.11.1, ROIno.11.5 on chr11



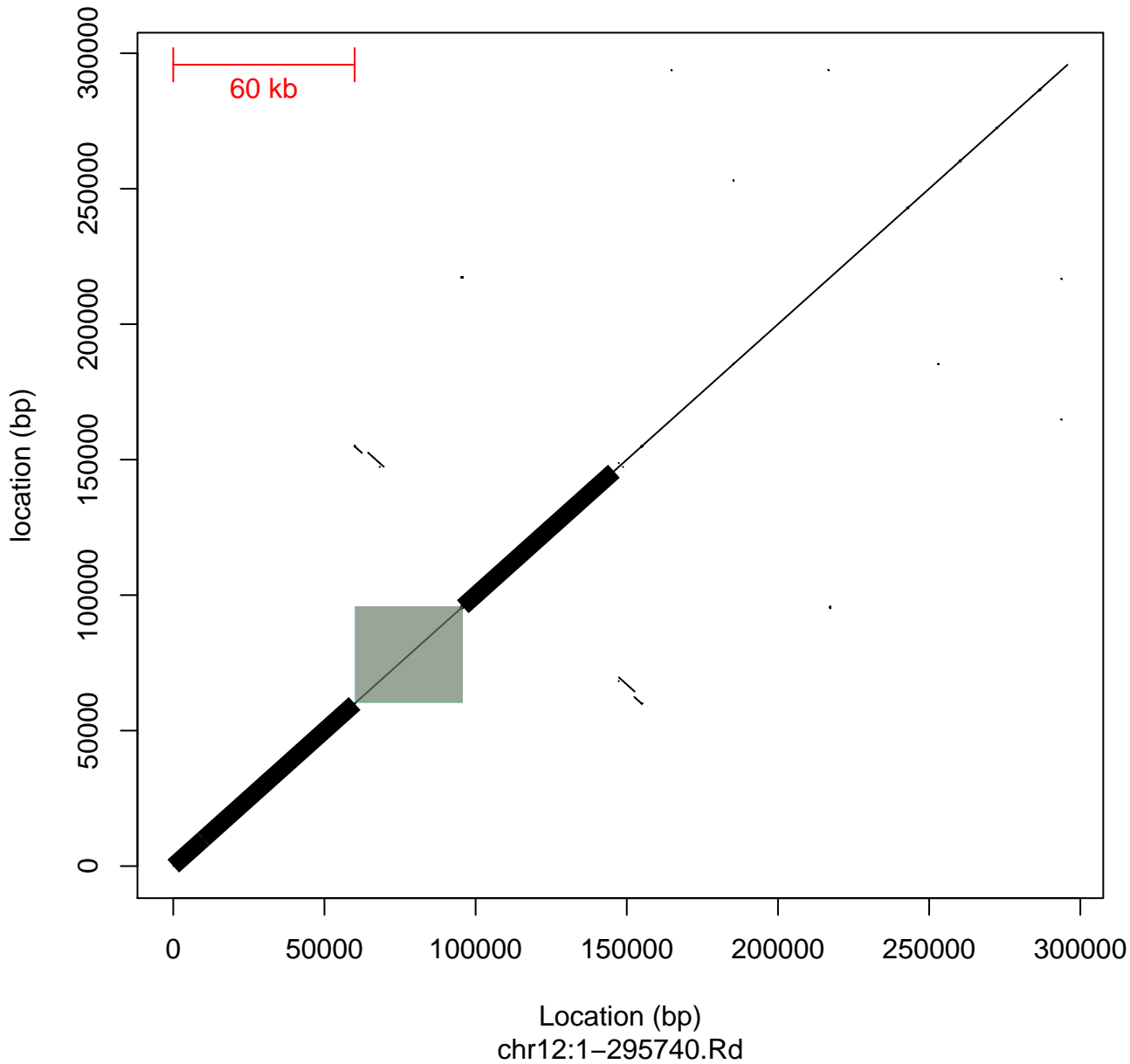
Dotplot of mBM.11.3, fCB.11.2 on chr11



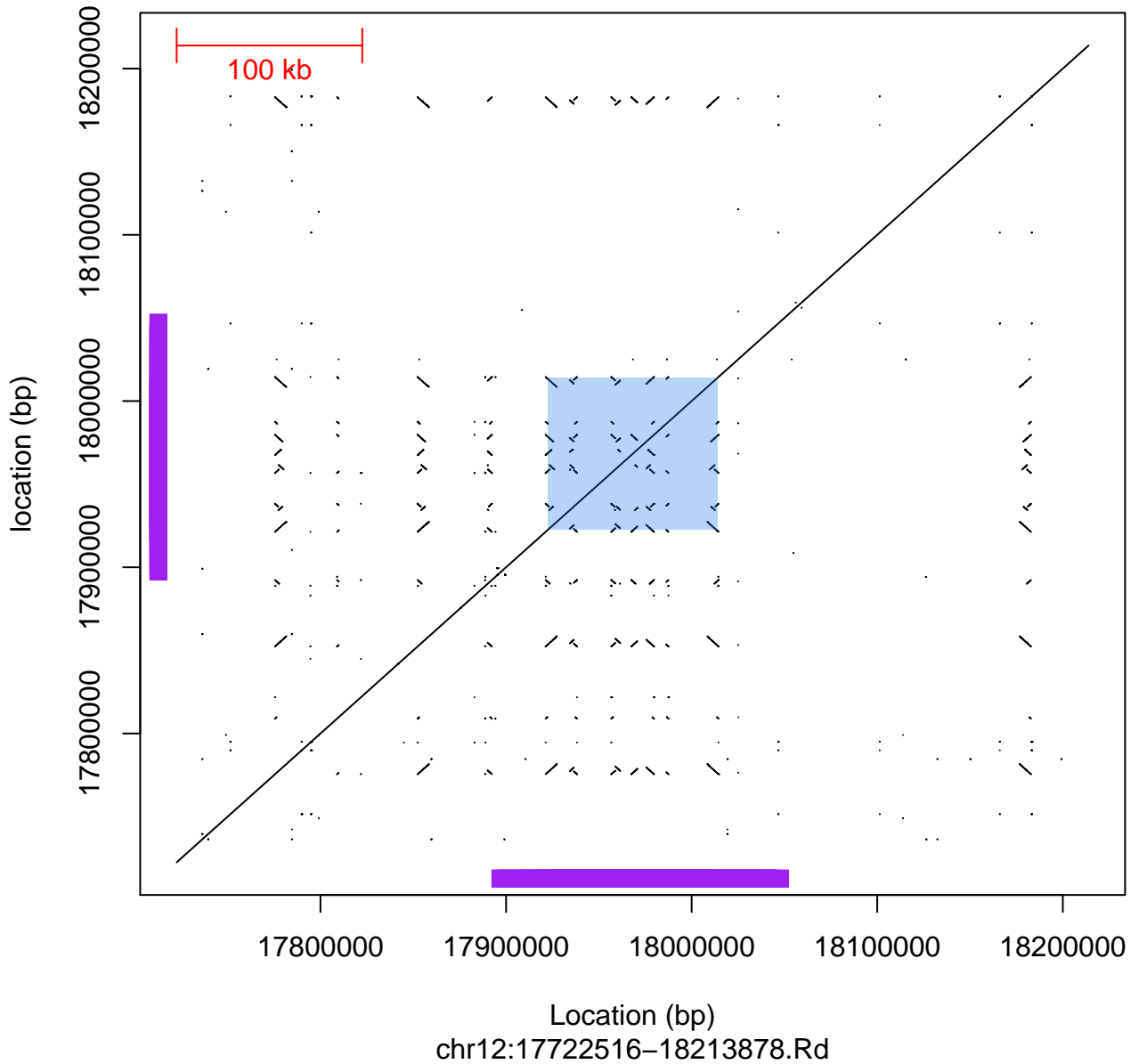
Dotplot of ROI No.11.7 on chr11



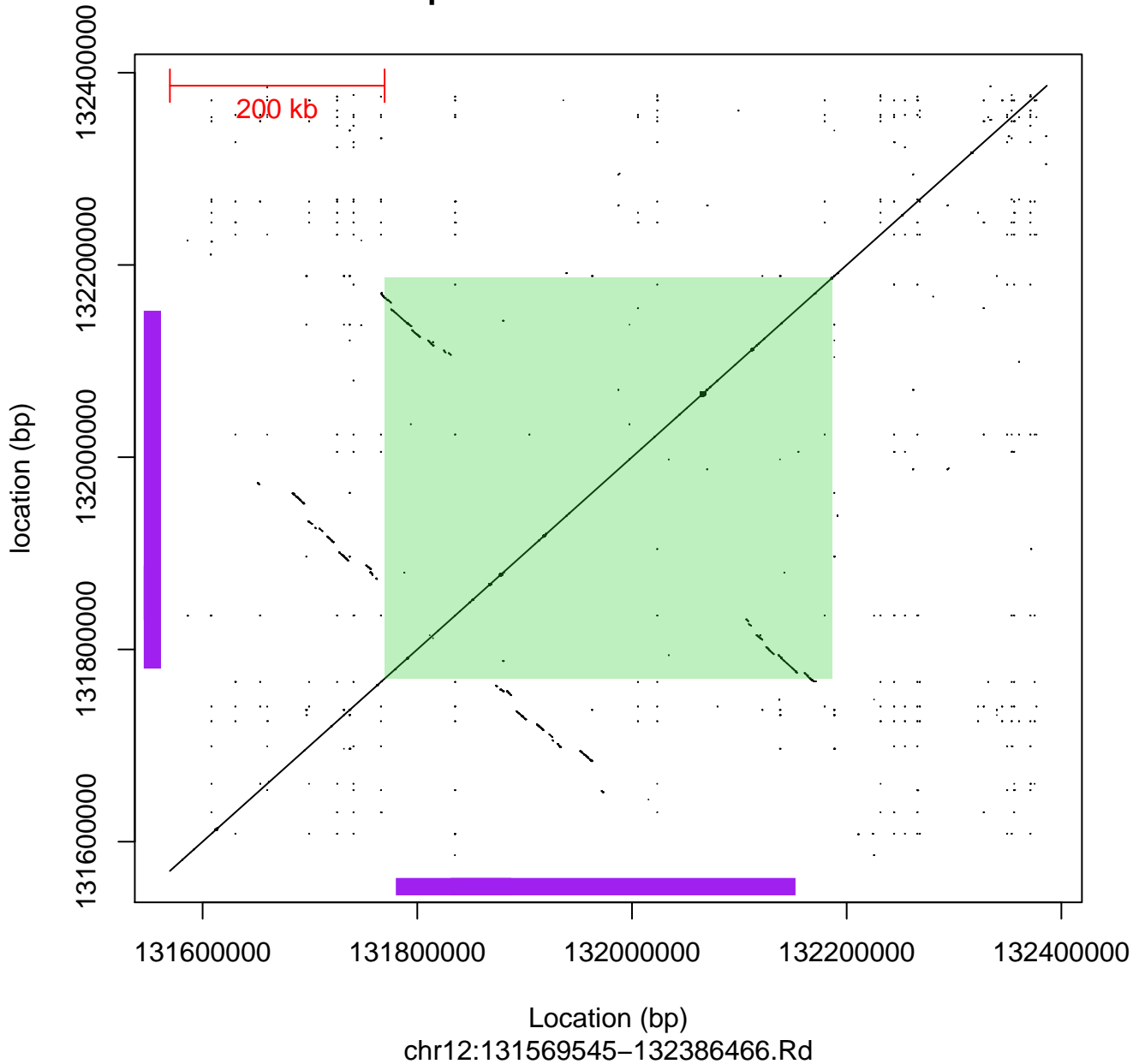
Dotplot of mBM.12.1, fCB.12.1, ROIno.12.1 on chr12



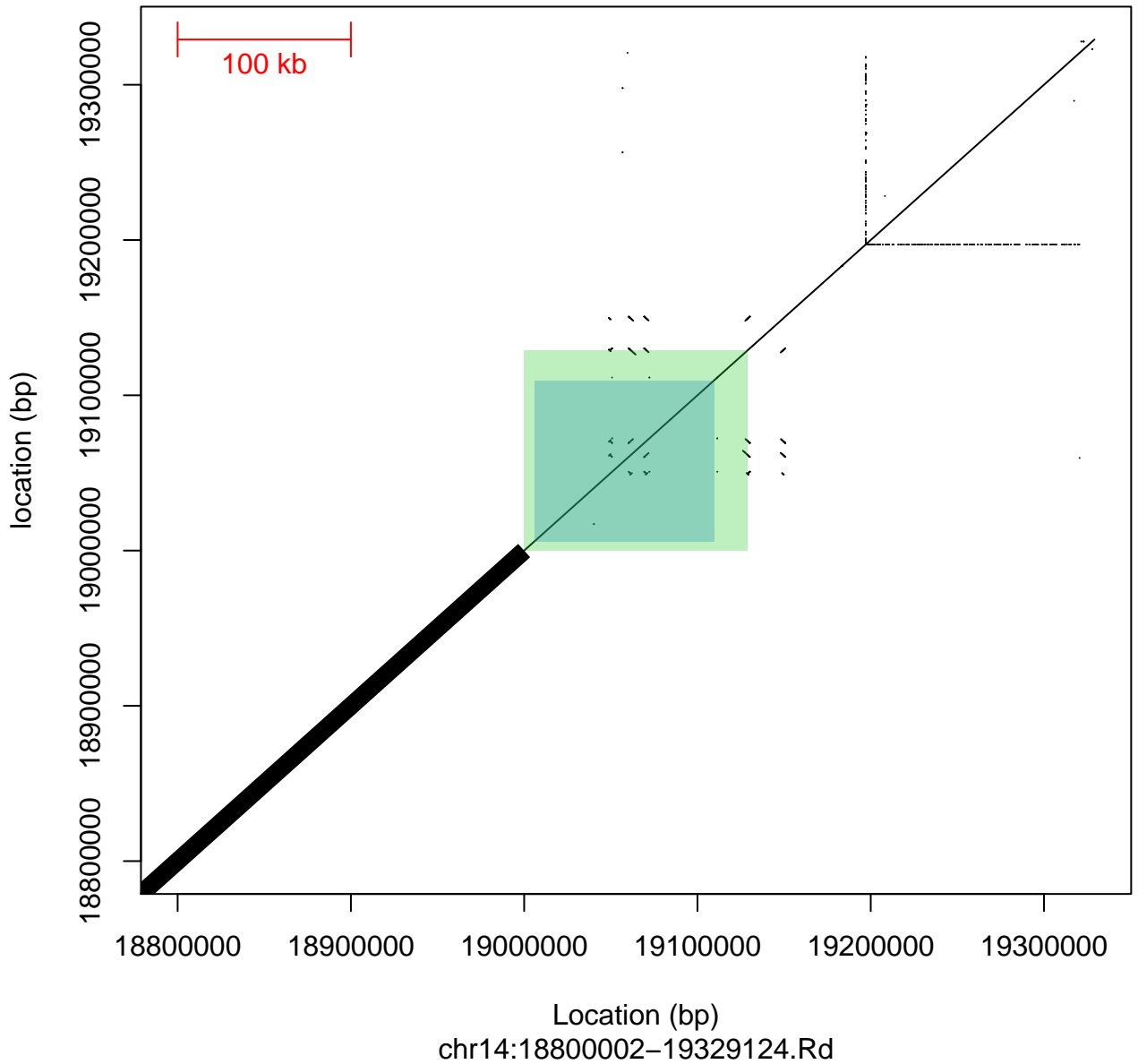
Dotplot of mBM.12.2 on chr12



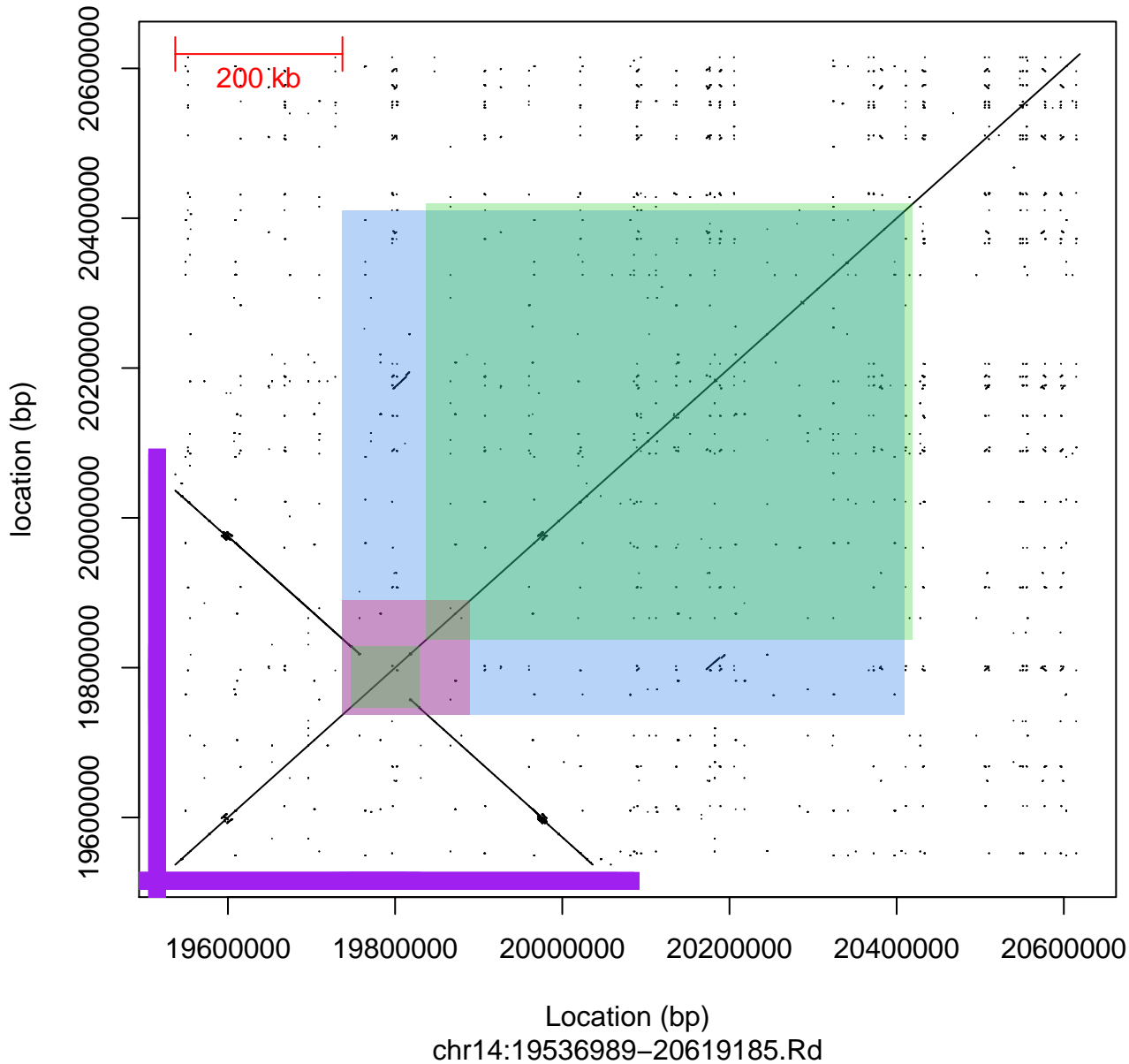
Dotplot of ROI No.12.5 on chr12



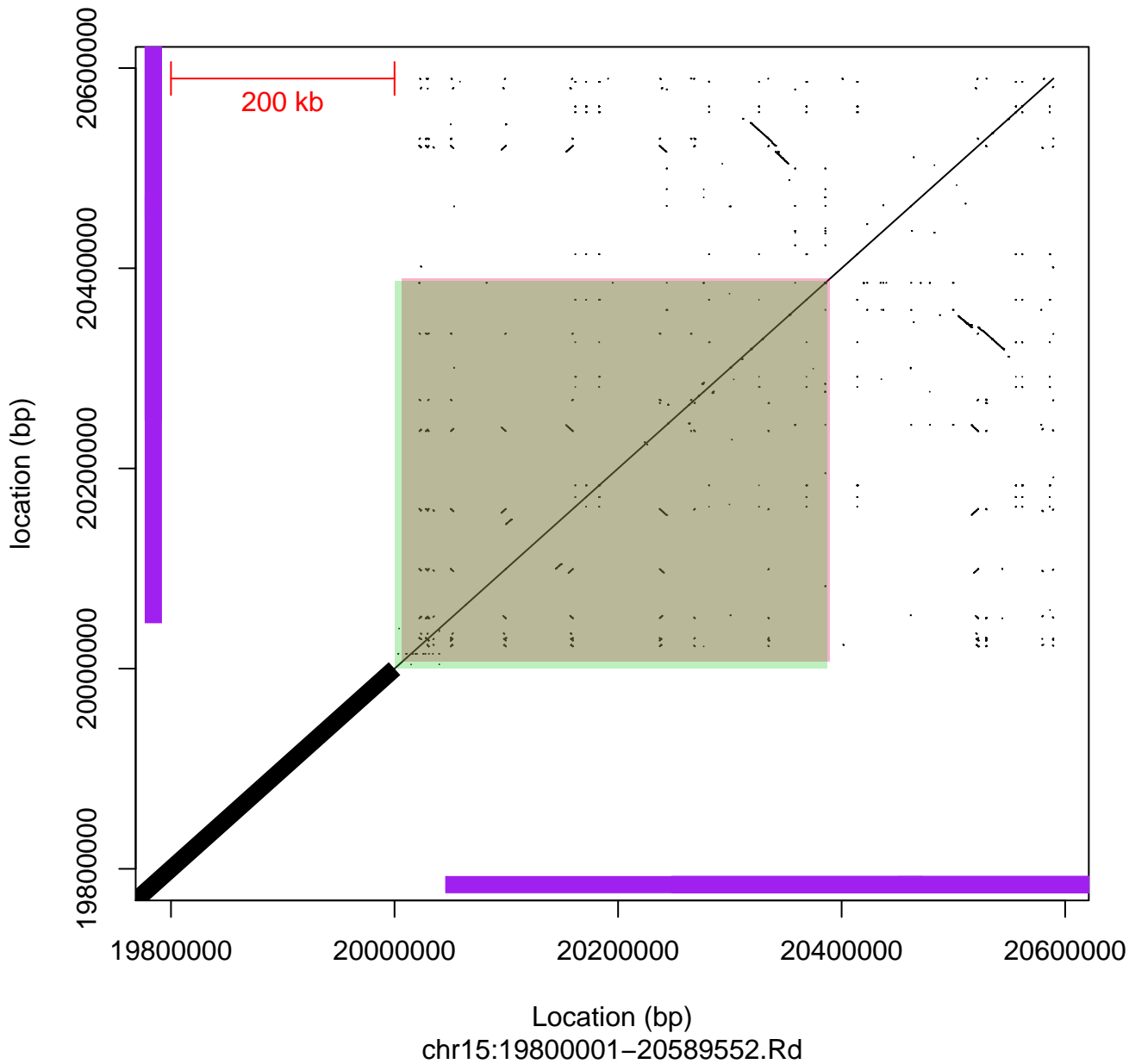
Dotplot of mBM.14.1, ROIno.14.1 on chr14



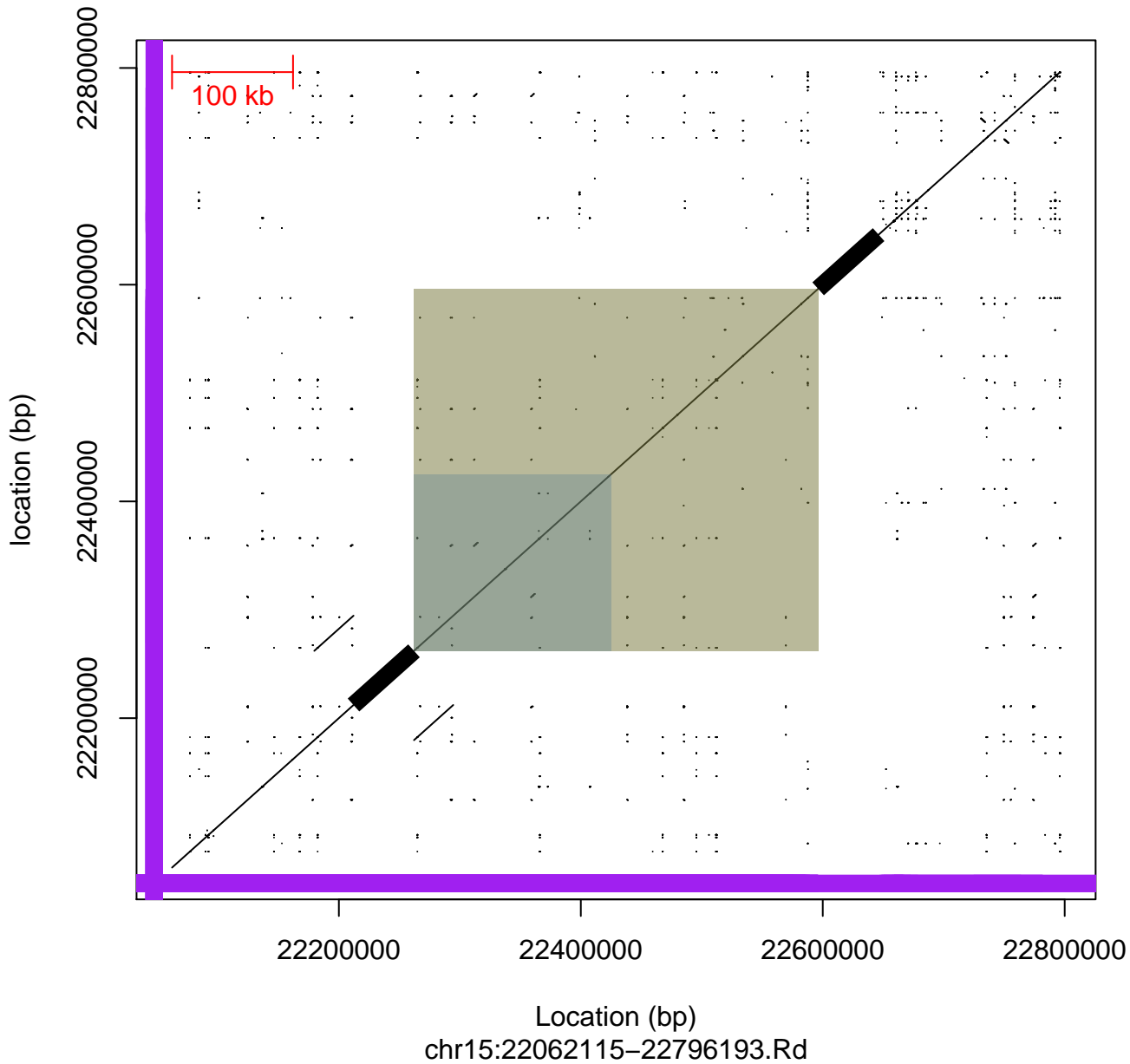
Dotplot of mBM.14.2, fCB.14.1, ROIno.14.3, ROIno.14.4 on chr14



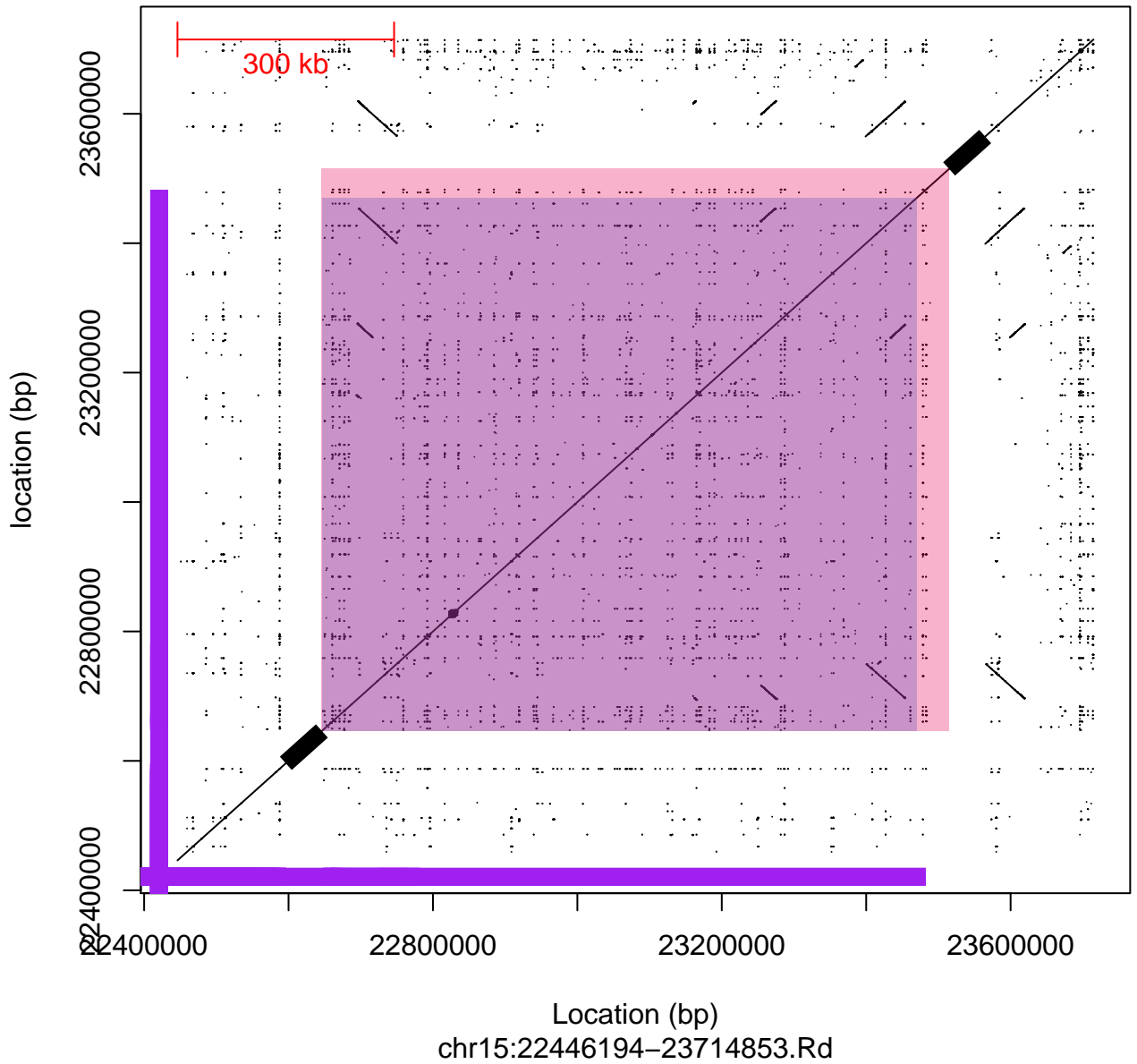
Dotplot of fCB.15.1, ROIno.15.1 on chr15



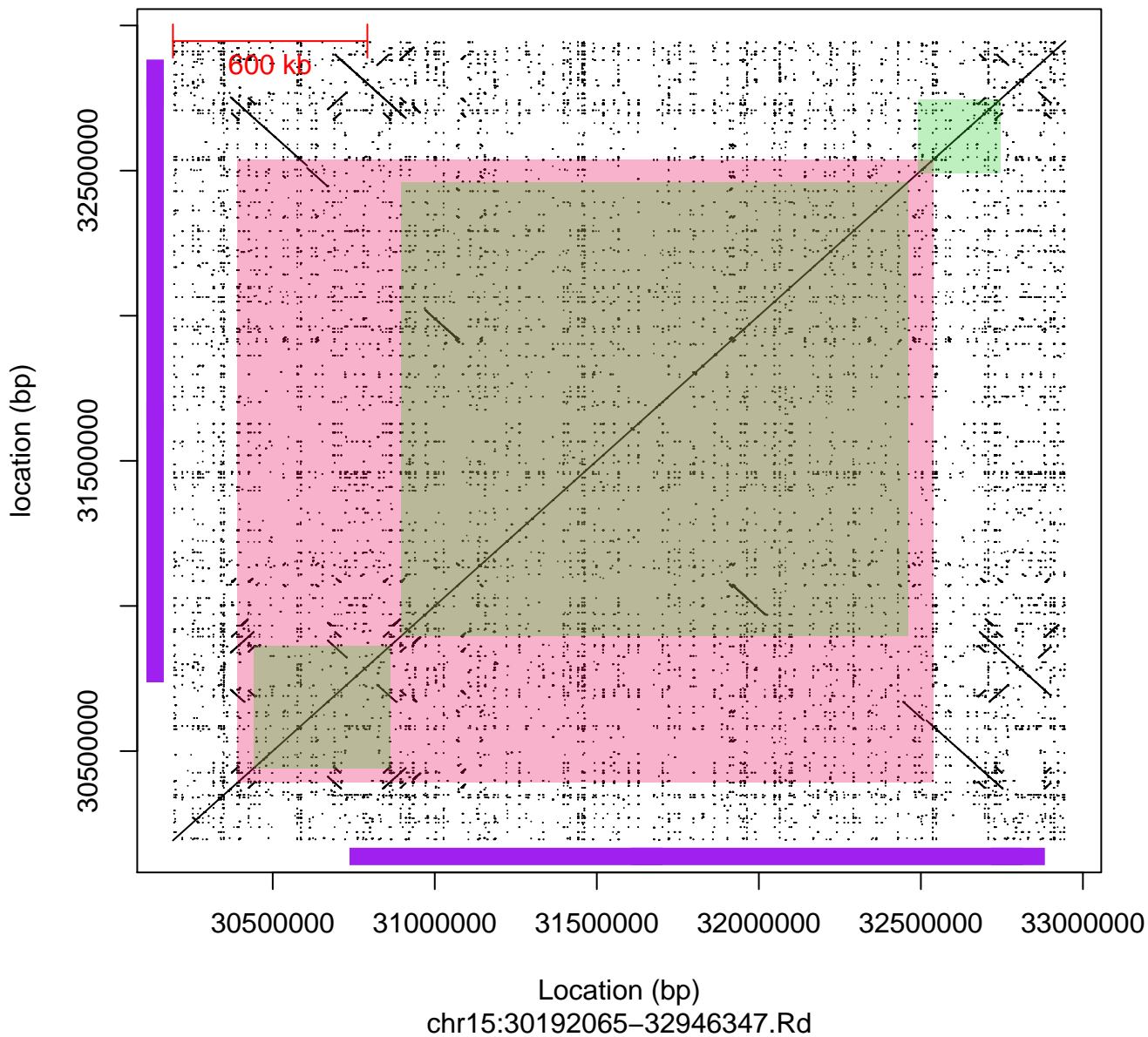
Dotplot of mBM.15.1, fCB.15.2, ROIno.15.5 on chr15



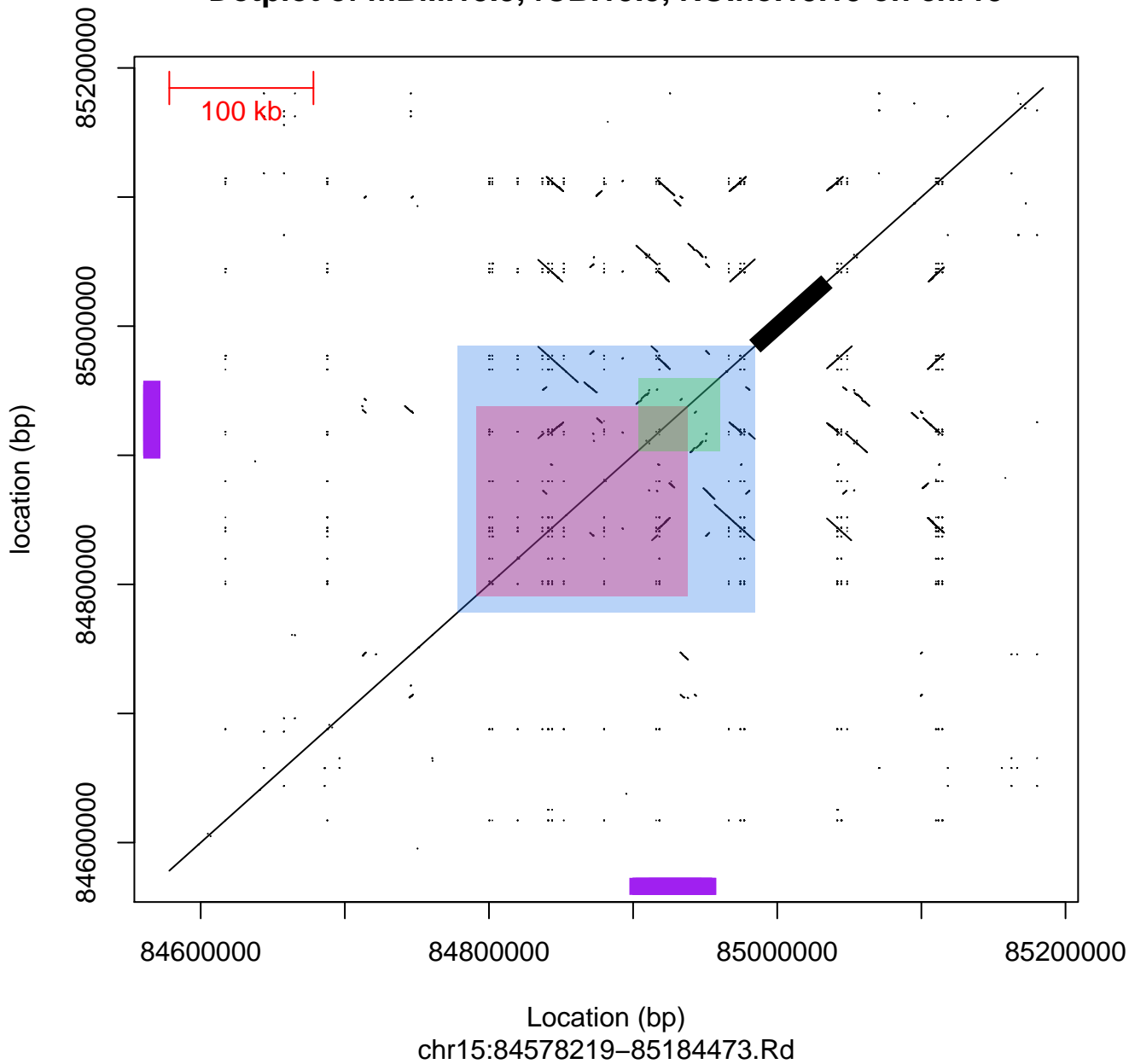
Dotplot of mBM.15.2, fCB.15.3 on chr15



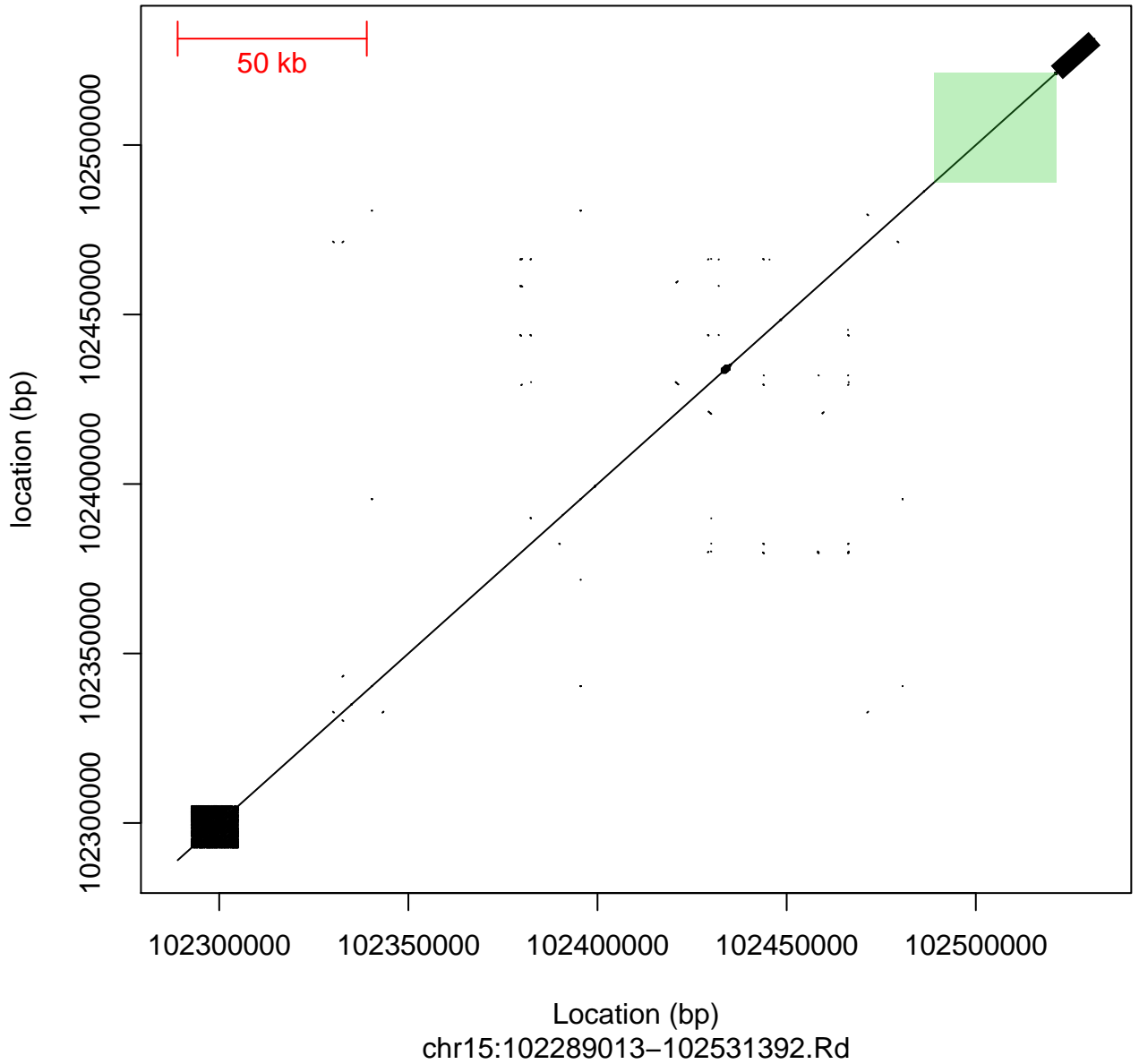
Dotplot of fCB.15.4, ROIno.15.8, ROIno.15.9, ROIno.15.10 on chr15



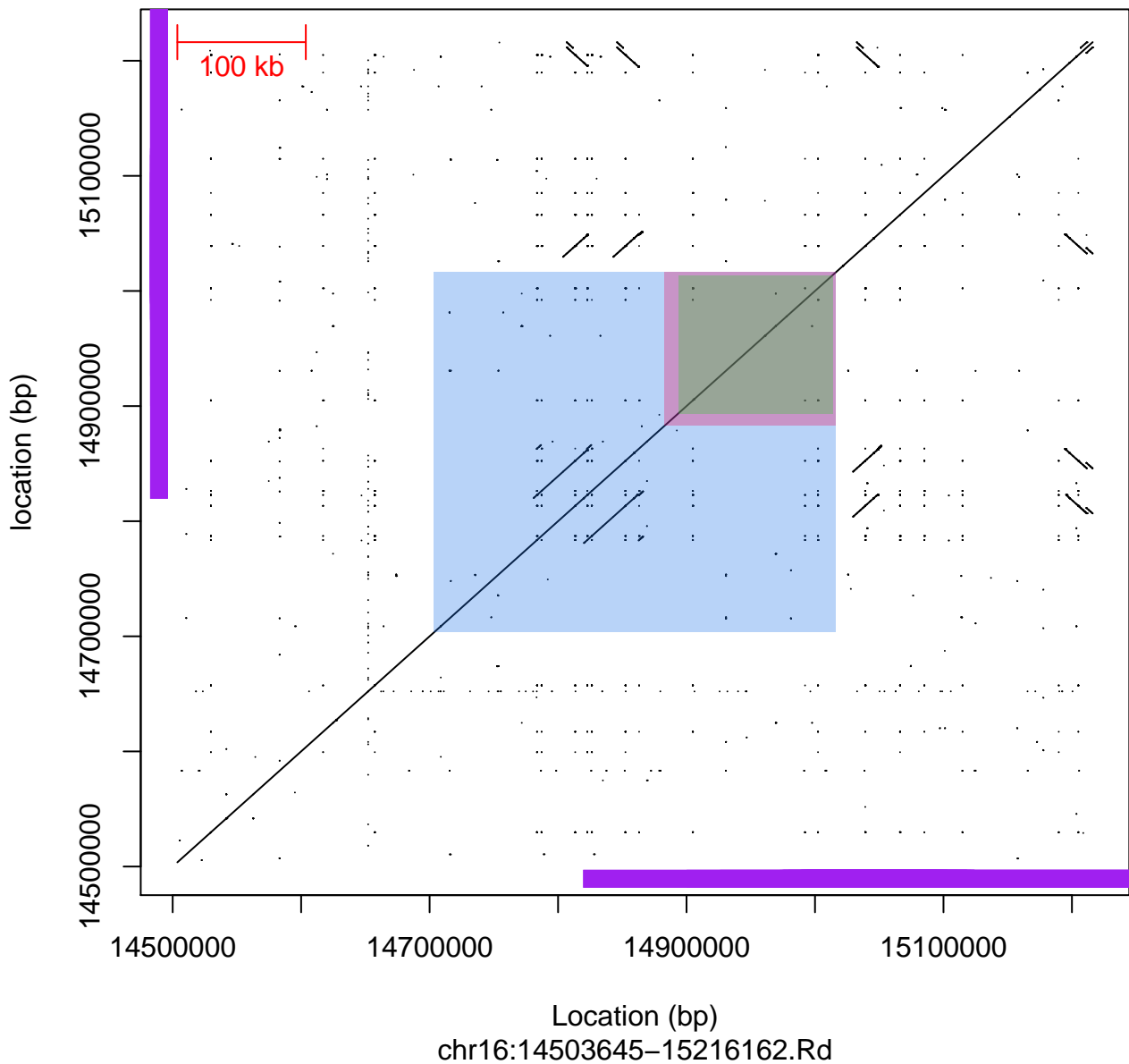
Dotplot of mBM.15.3, fCB.15.5, ROIno.15.15 on chr15



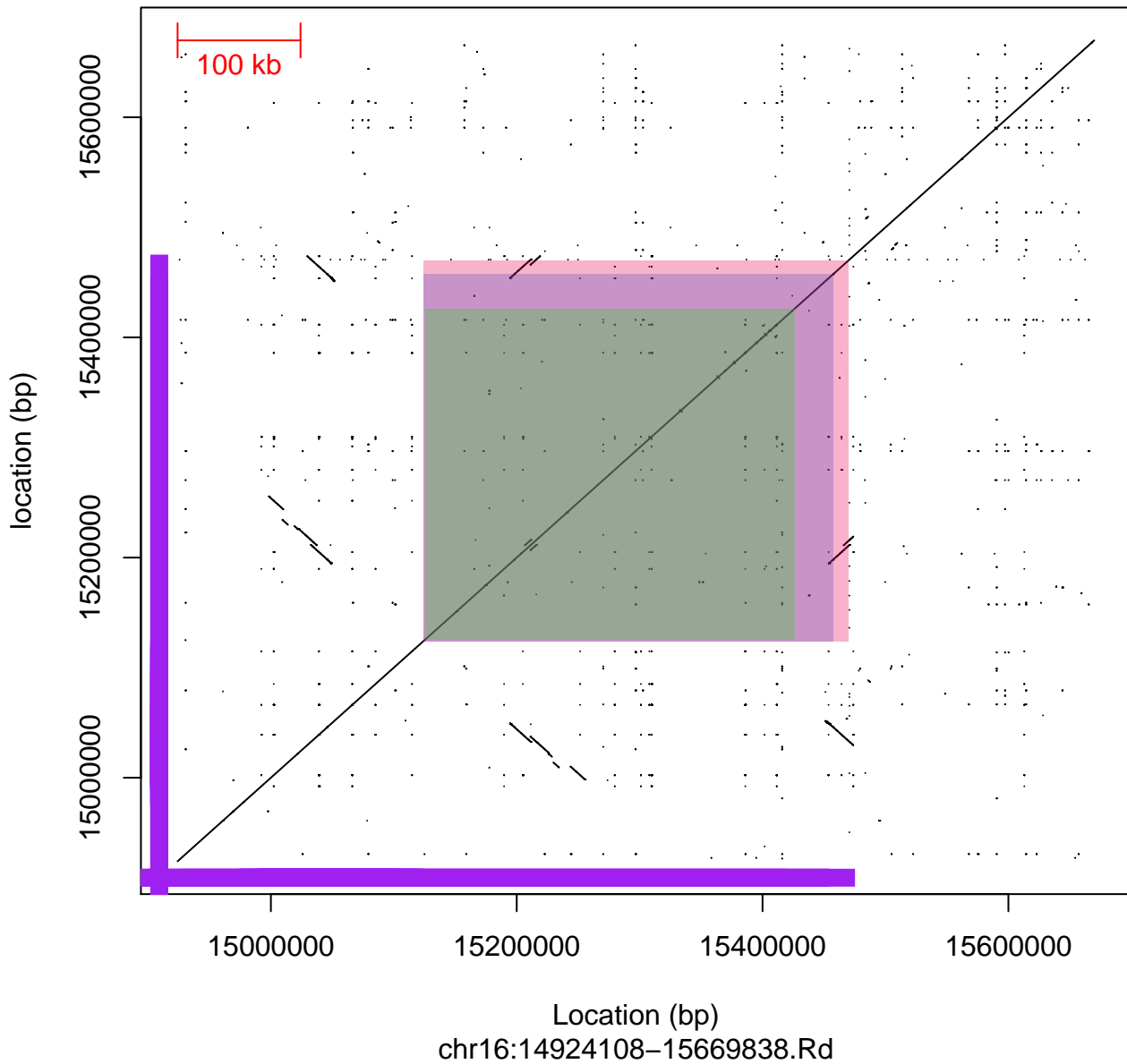
Dotplot of ROIno.15.16 on chr15



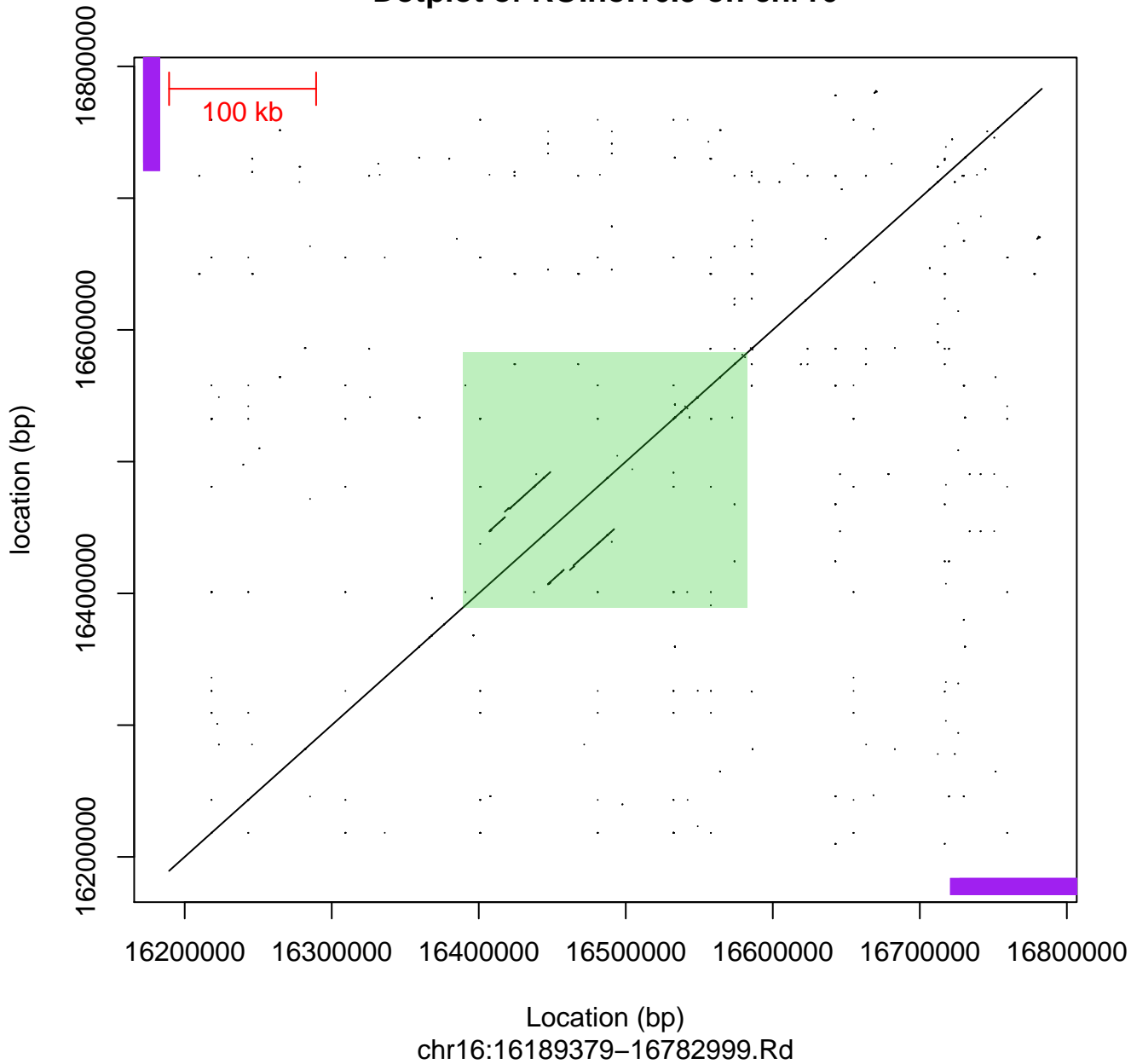
Dotplot of mBM.16.1, fCB.16.1, ROIno.16.2 on chr16



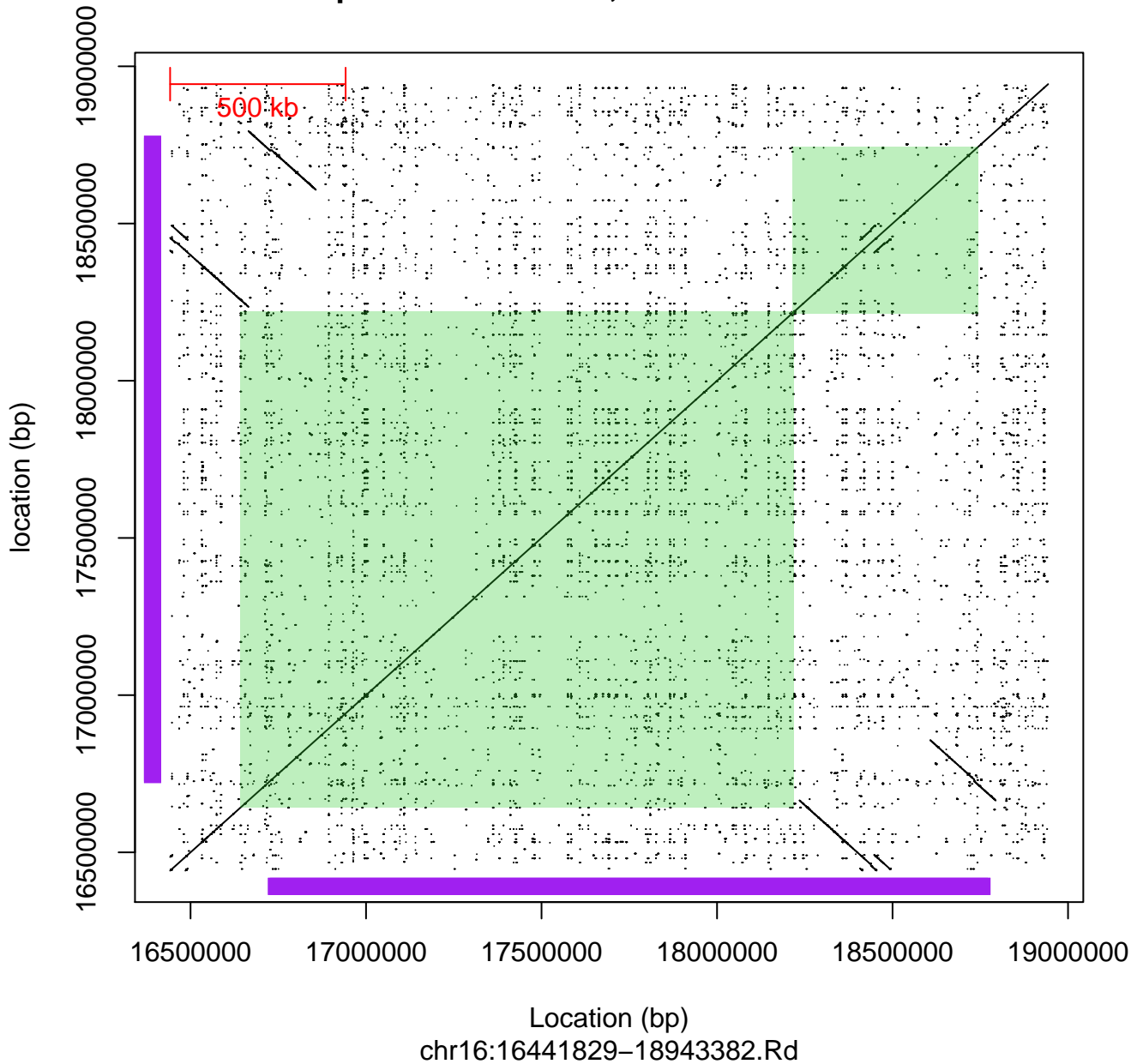
Dotplot of mBM.16.2, fCB.16.2, ROIno.16.4 on chr16



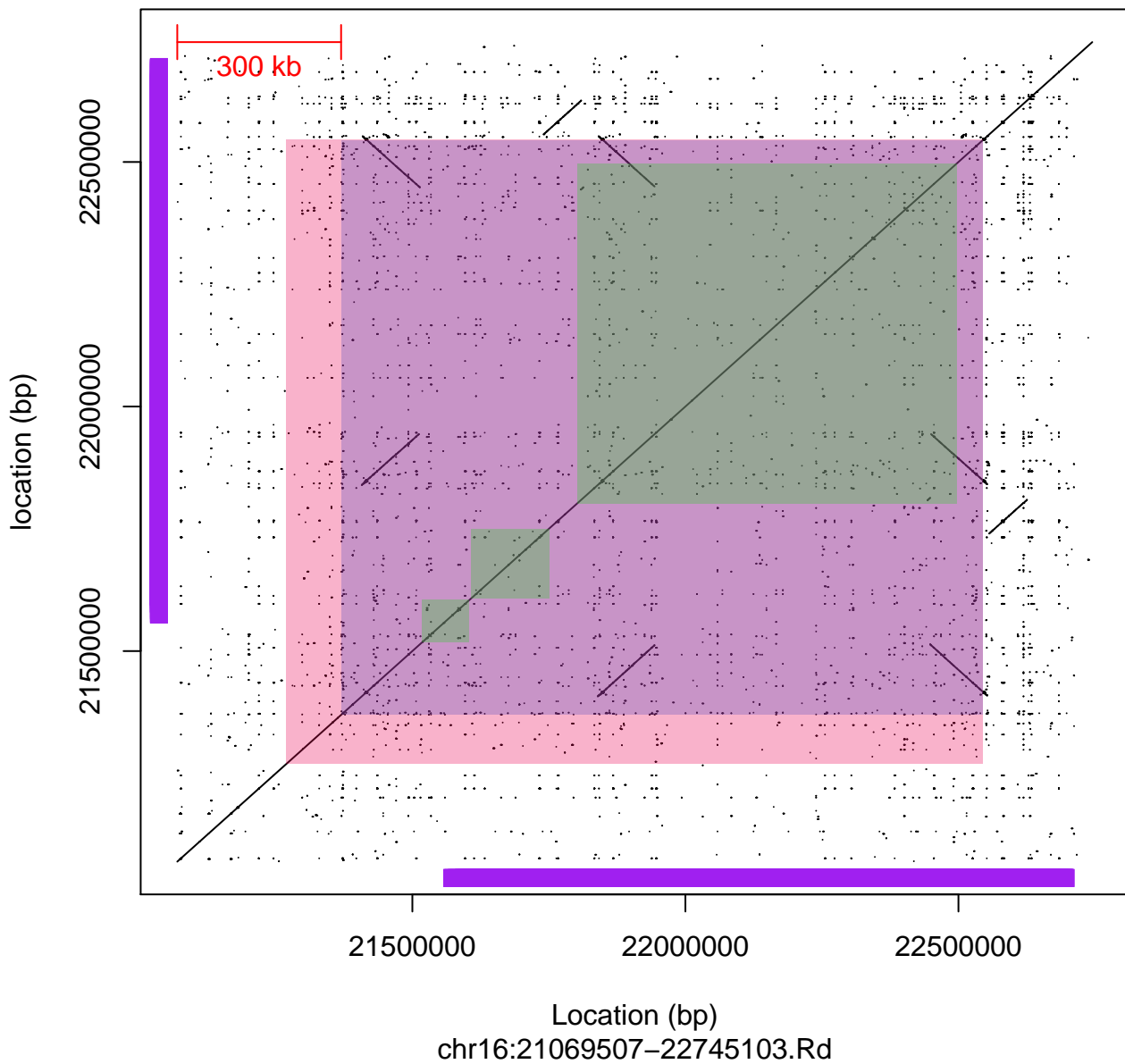
Dotplot of ROI No.16.5 on chr16



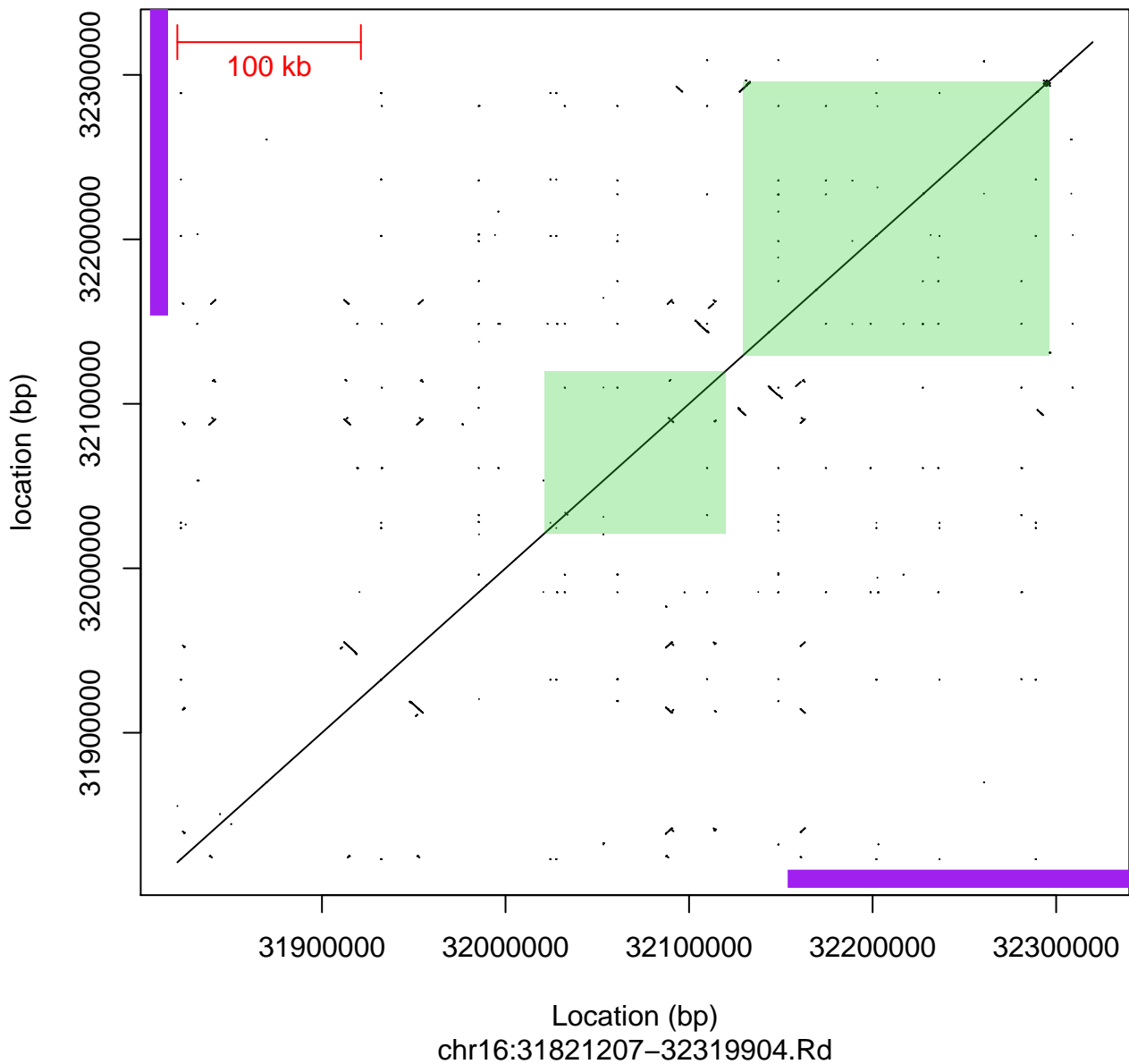
Dotplot of ROIno.16.6, ROIno.16.7 on chr16



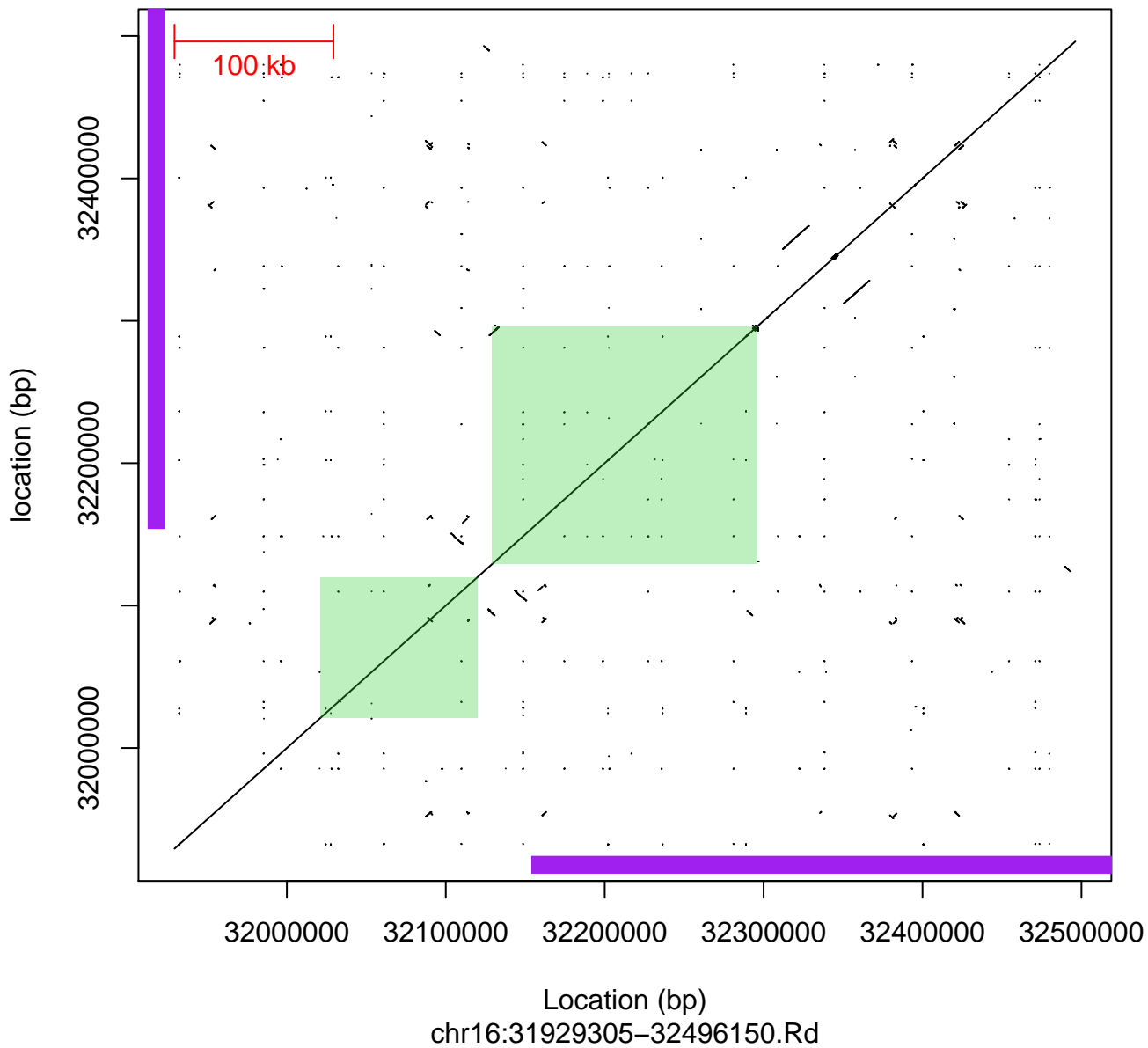
Dotplot of mBM.16.3, fCB.16.3, ROIno.16.8, ROIno.16.9, ROIno.16.11 on chr16



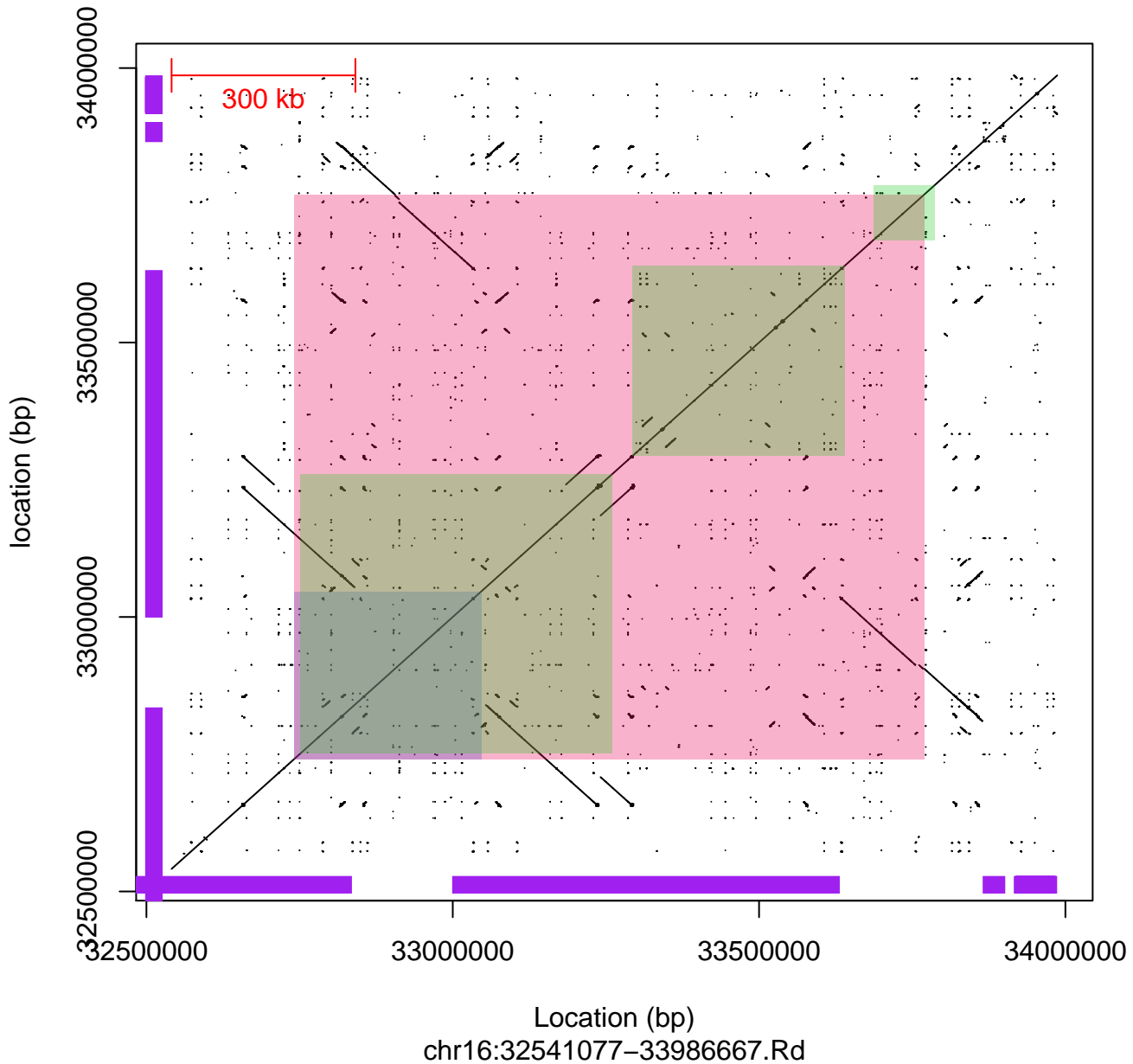
Dotplot of ROIno.16.14, ROIno.16.15 on chr16



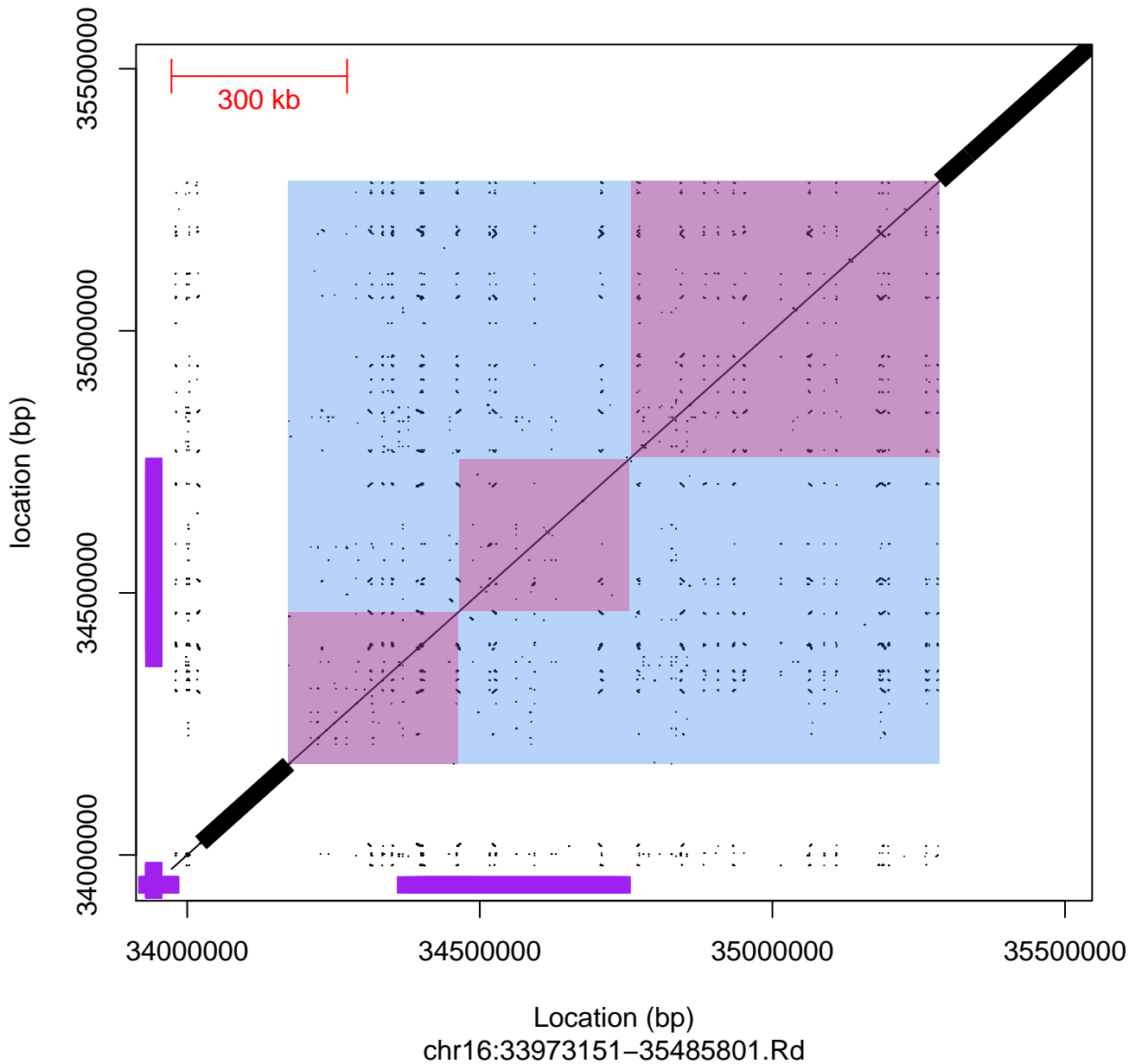
Dotplot of ROIno.16.14, ROIno.16.15 on chr16



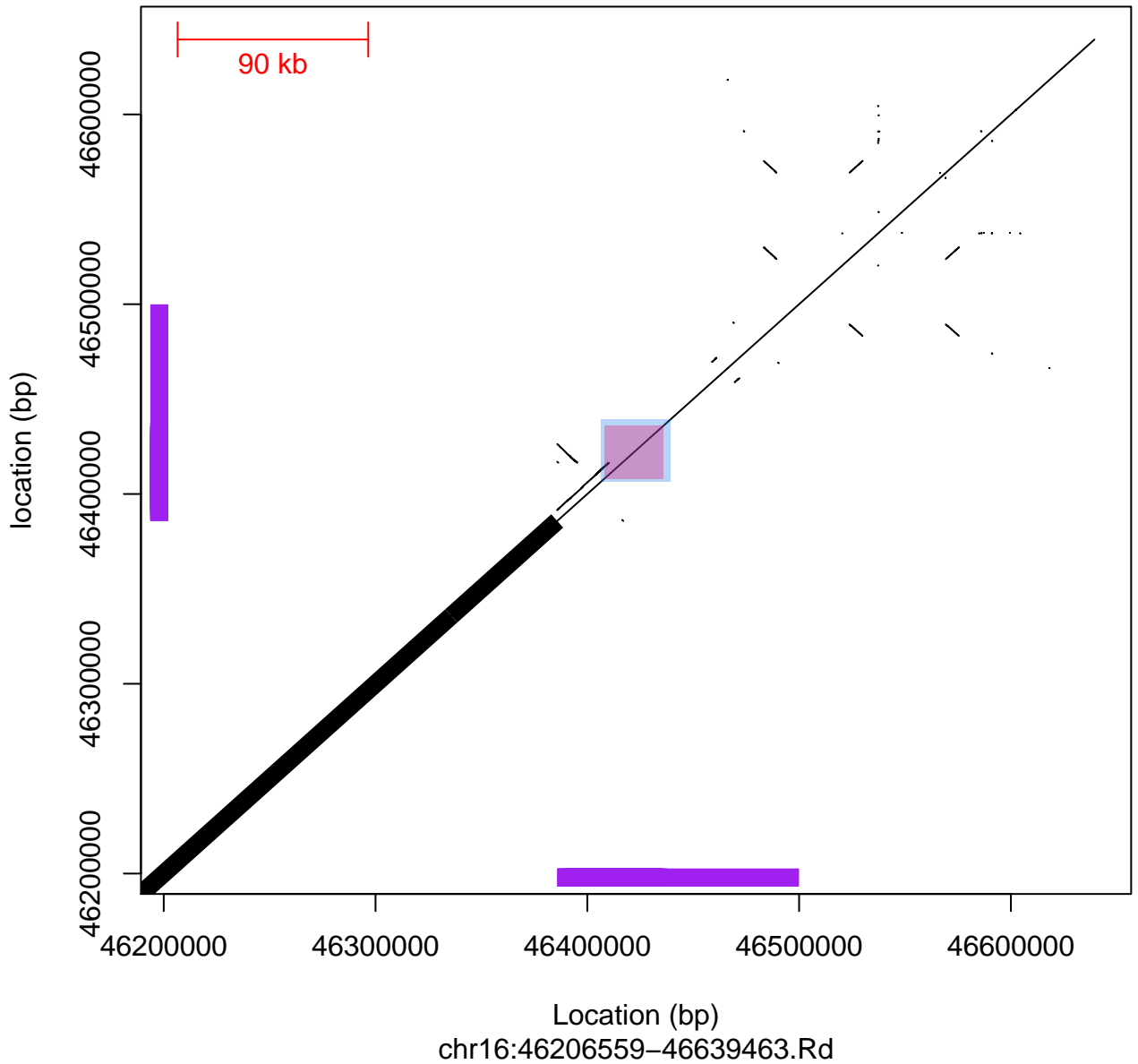
Dotplot of mBM.16.5, fCB.16.5, ROIno.16.17, ROIno.16.18, ROIno.16.19 on chr16



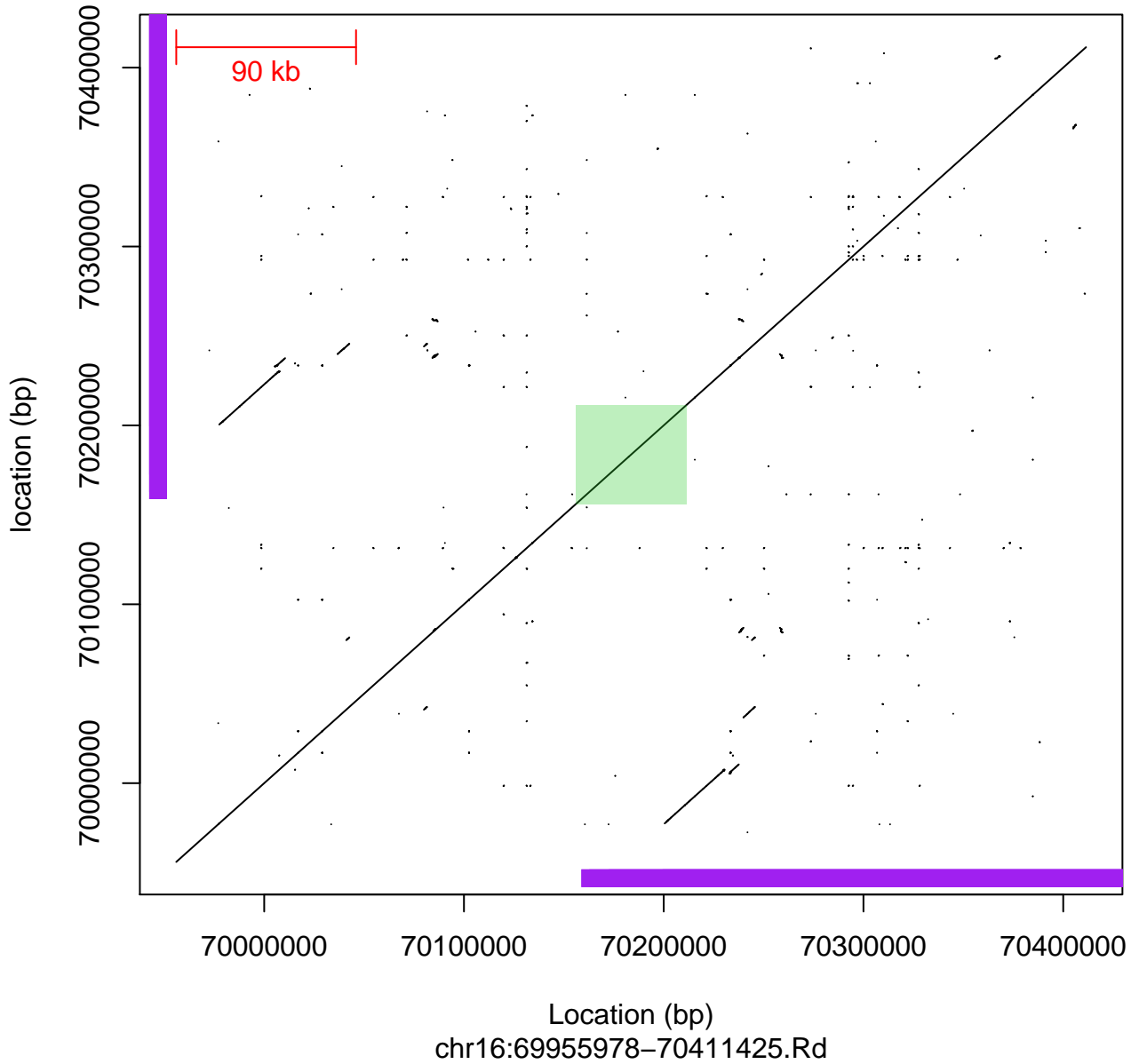
Dotplot of mBM.16.6, fCB.16.6, fCB.16.7, fCB.16.8 on chr16



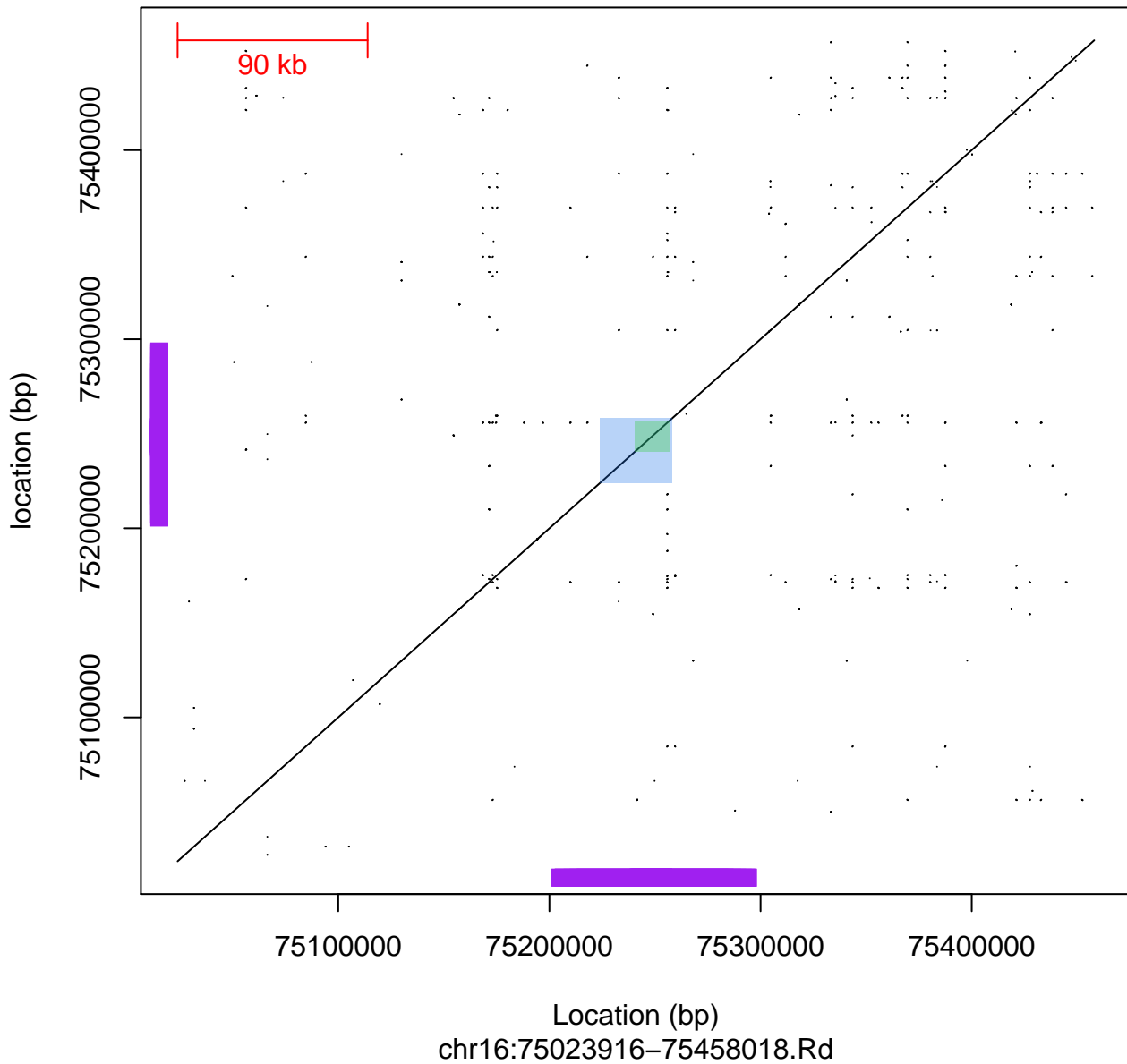
Dotplot of mBM.16.7, fCB.16.9 on chr16



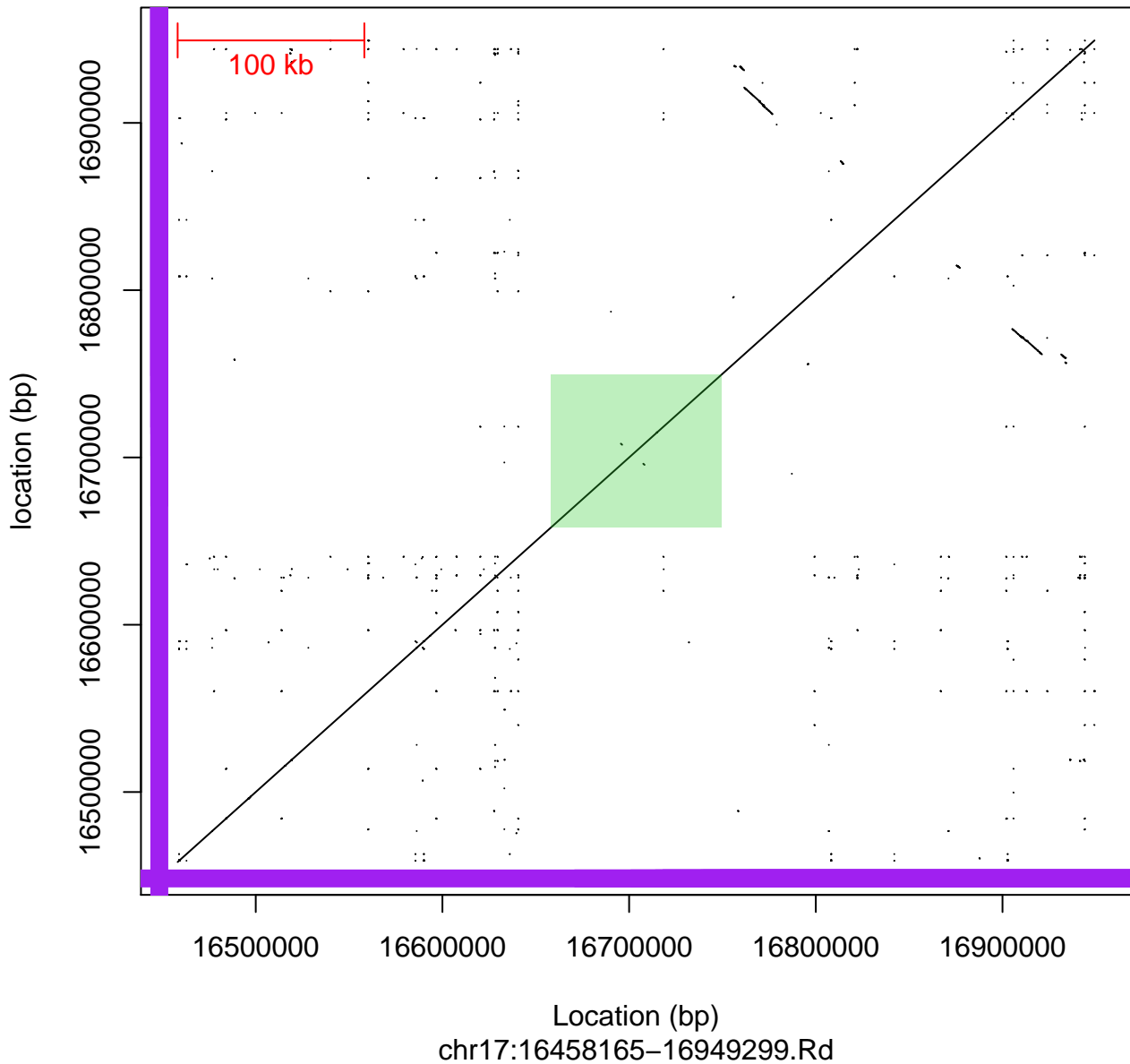
Dotplot of ROIno.16.25 on chr16



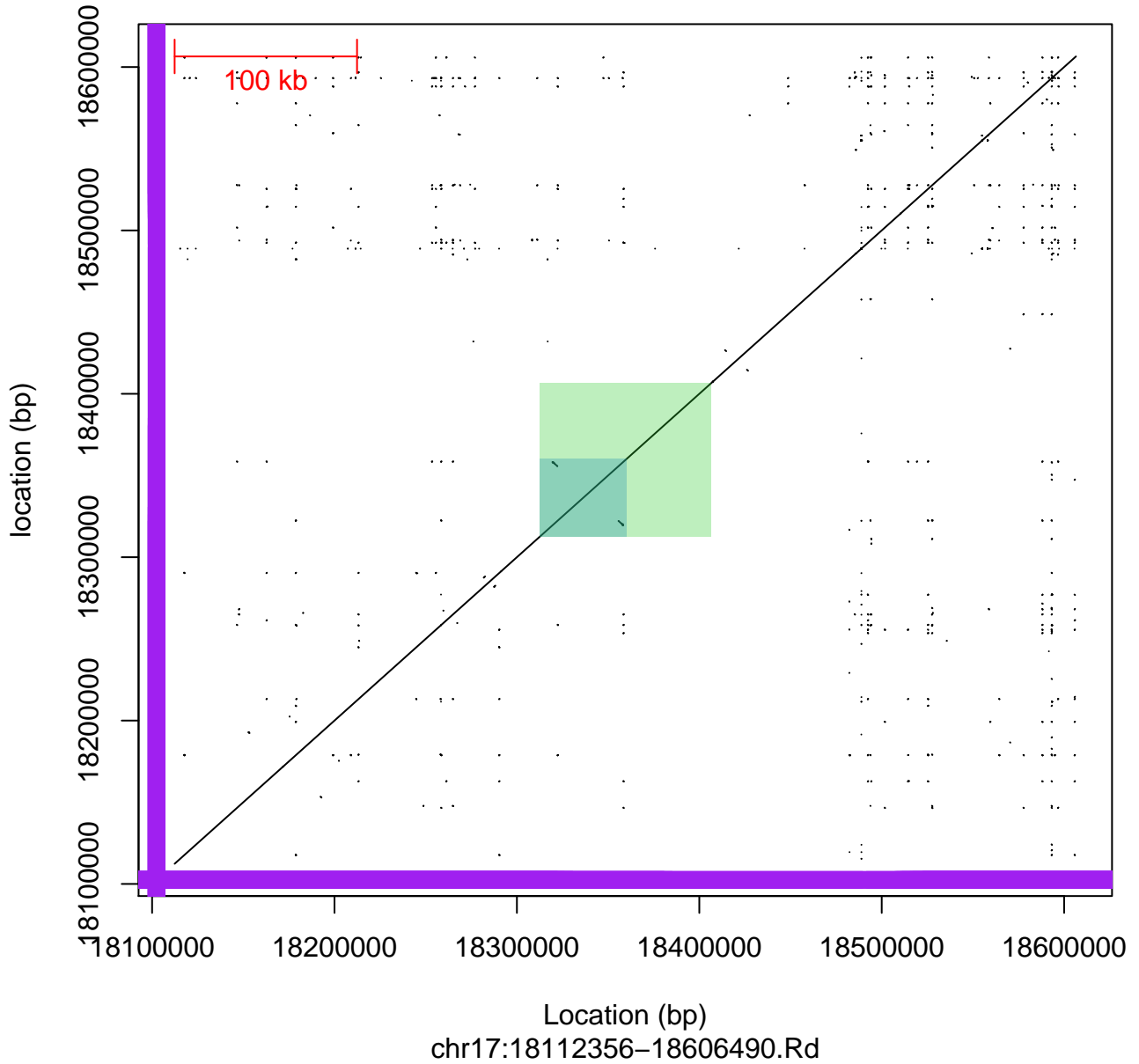
Dotplot of mBM.16.8, ROIno.16.26 on chr16



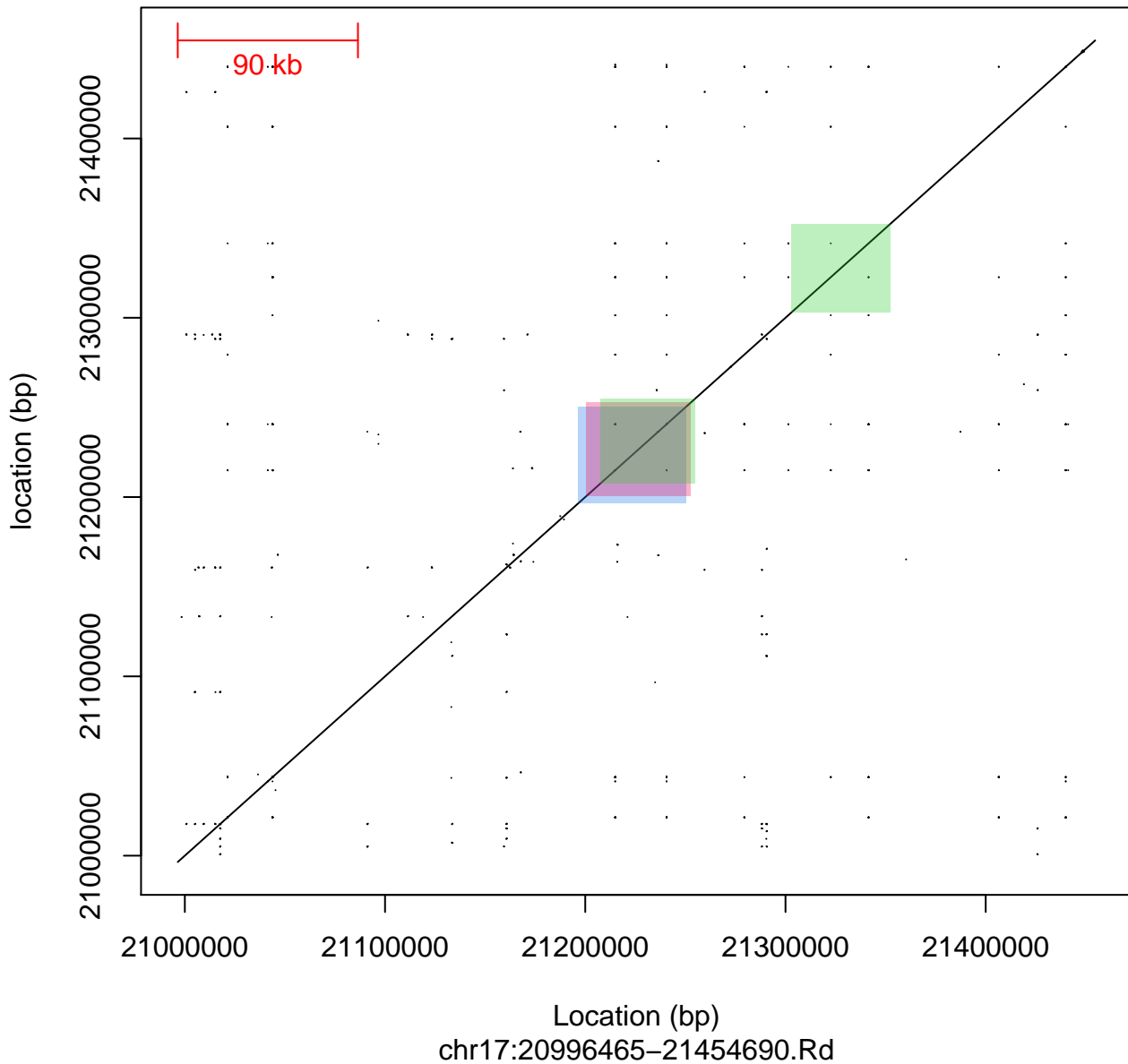
Dotplot of ROI No.17.1 on chr17



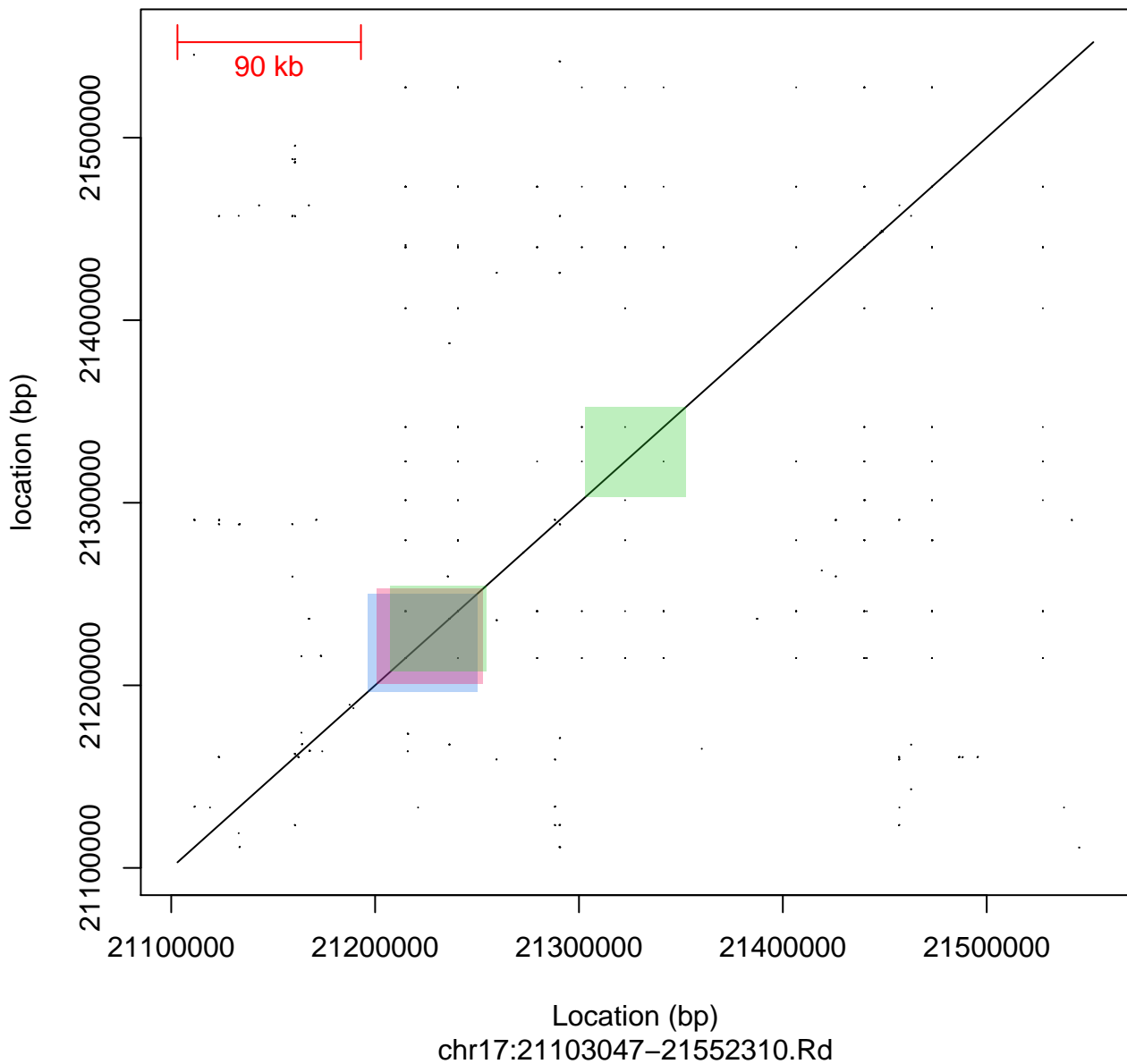
Dotplot of mBM.17.1, ROIno.17.2 on chr17



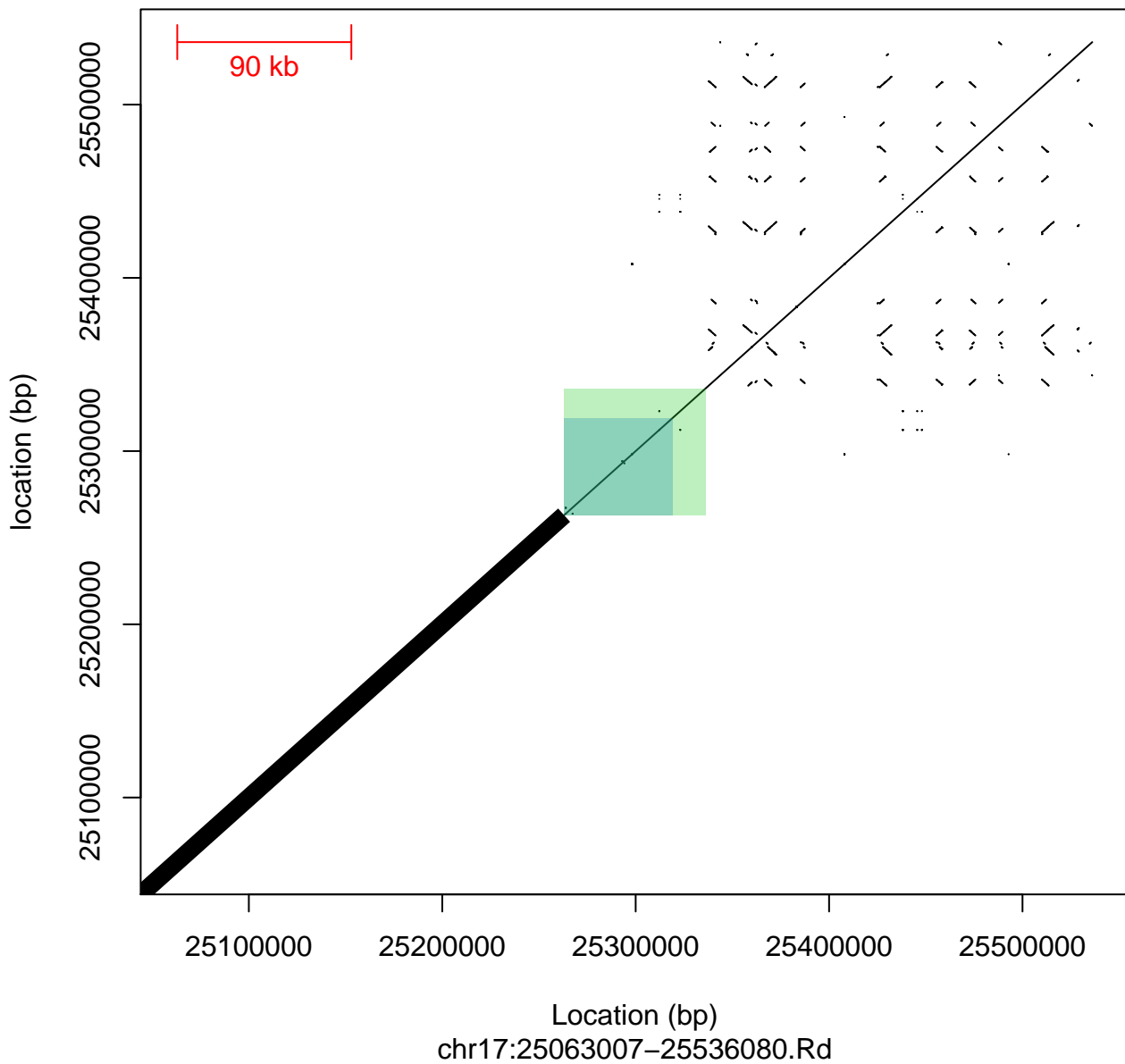
Dotplot of mBM.17.2, fCB.17.1, ROIno.17.4, ROIno.17.5 on chr17



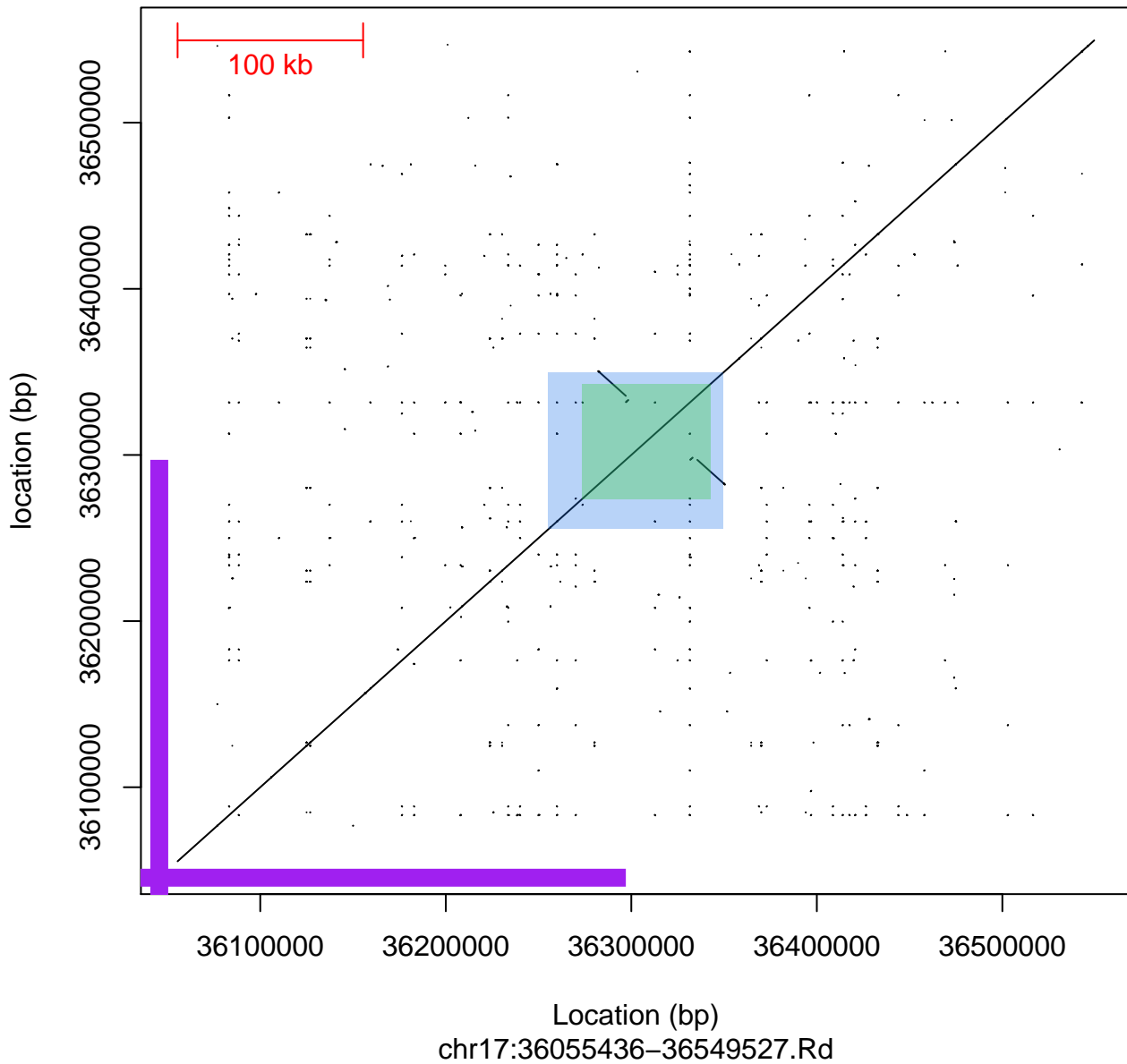
Dotplot of mBM.17.2, fCB.17.1, ROIno.17.4, ROIno.17.5 on chr17



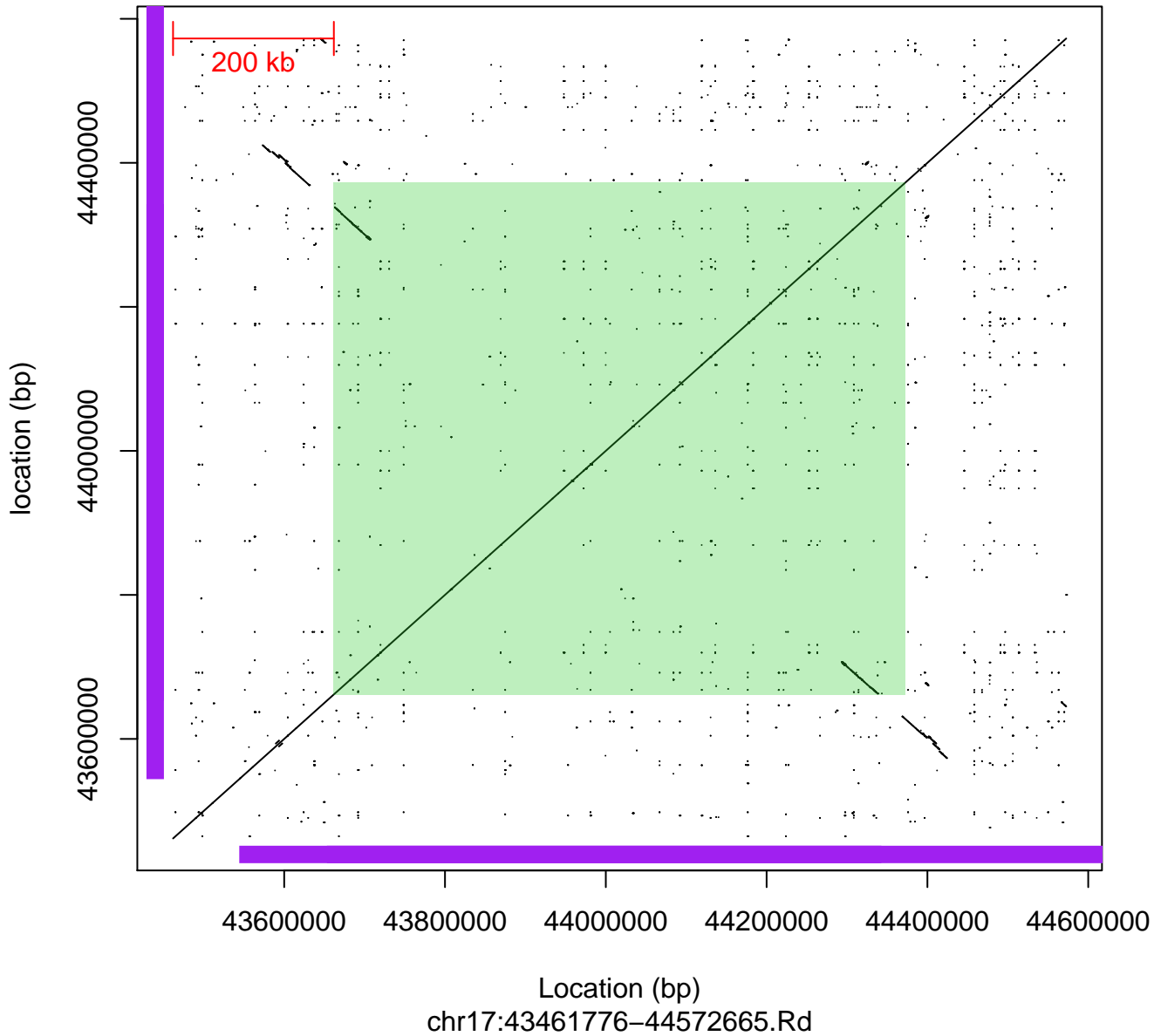
Dotplot of mBM.17.3, ROIno.17.7 on chr17



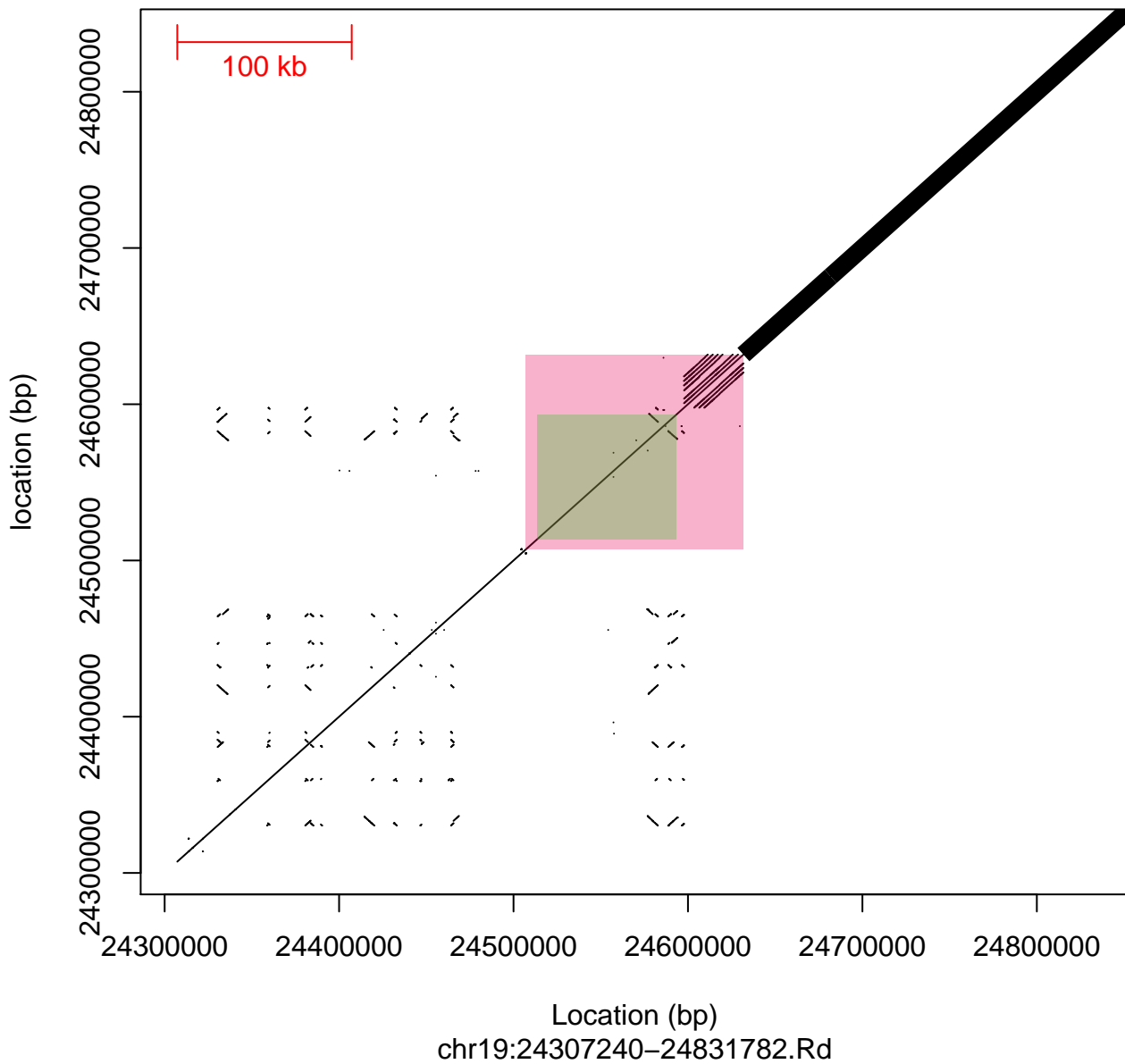
Dotplot of mBM.17.4, ROIno.17.10 on chr17



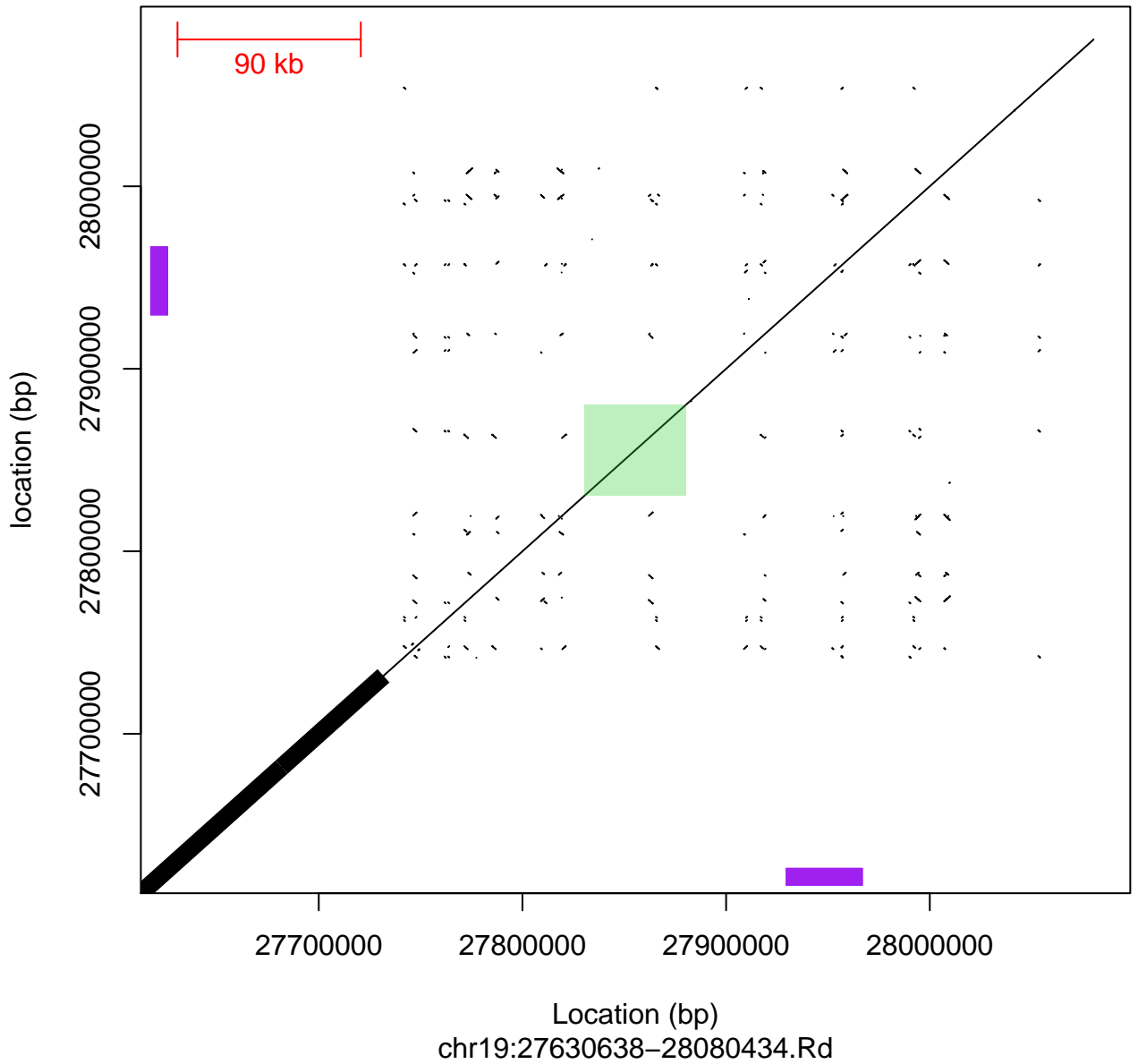
Dotplot of ROIno.17.16 on chr17



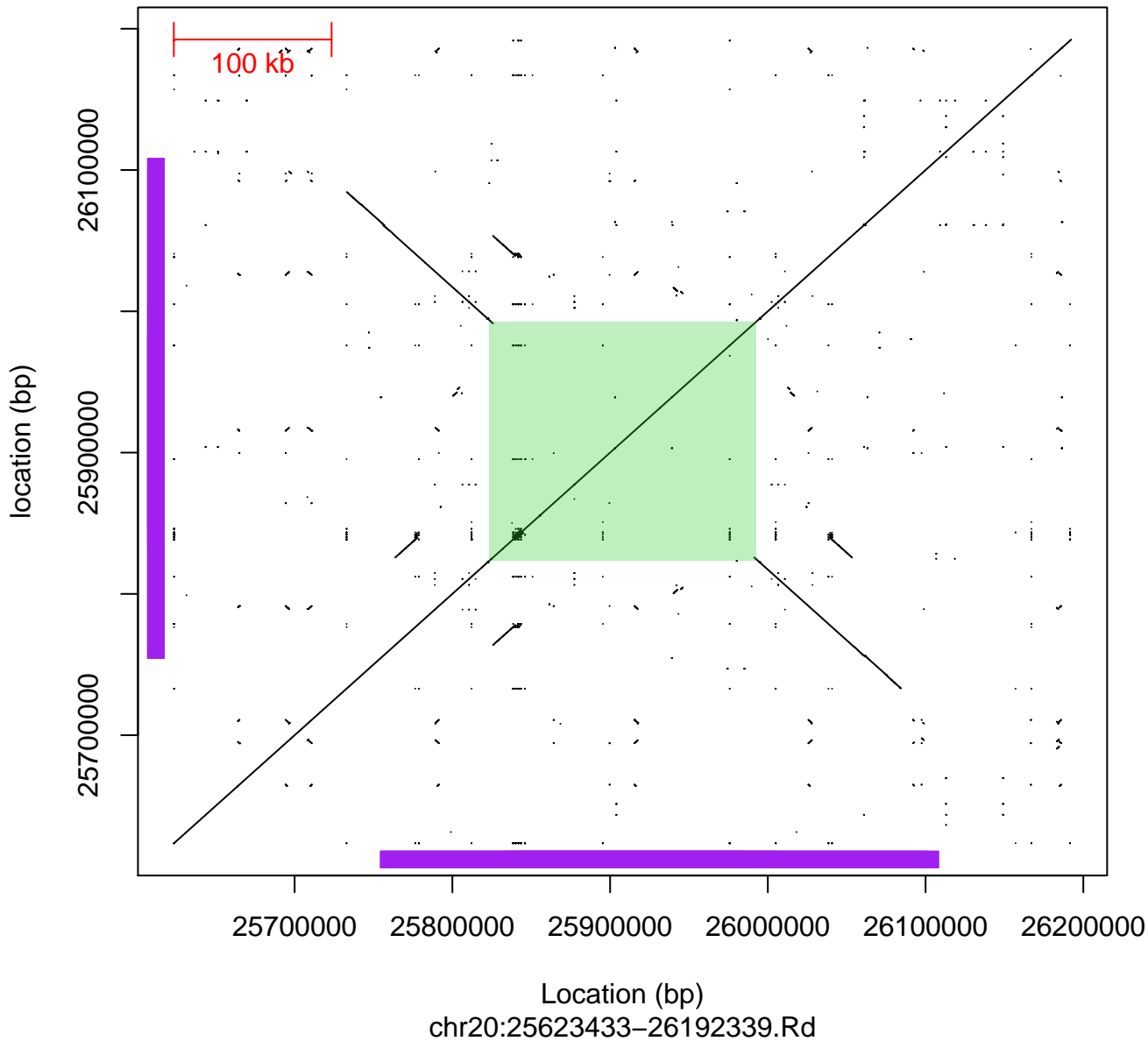
Dotplot of fCB.19.1, ROIno.19.1 on chr19



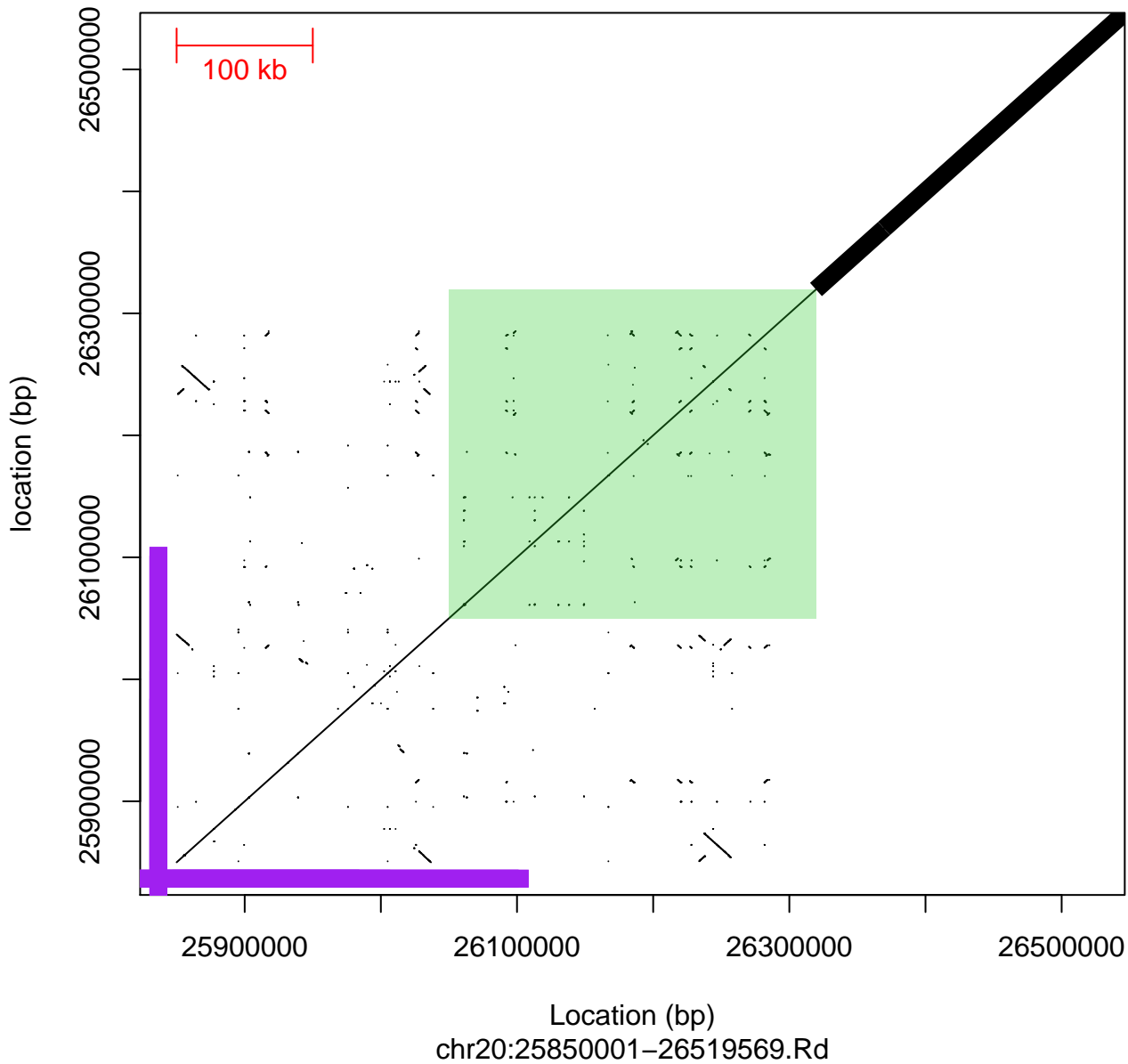
Dotplot of ROI No.19.3 on chr19



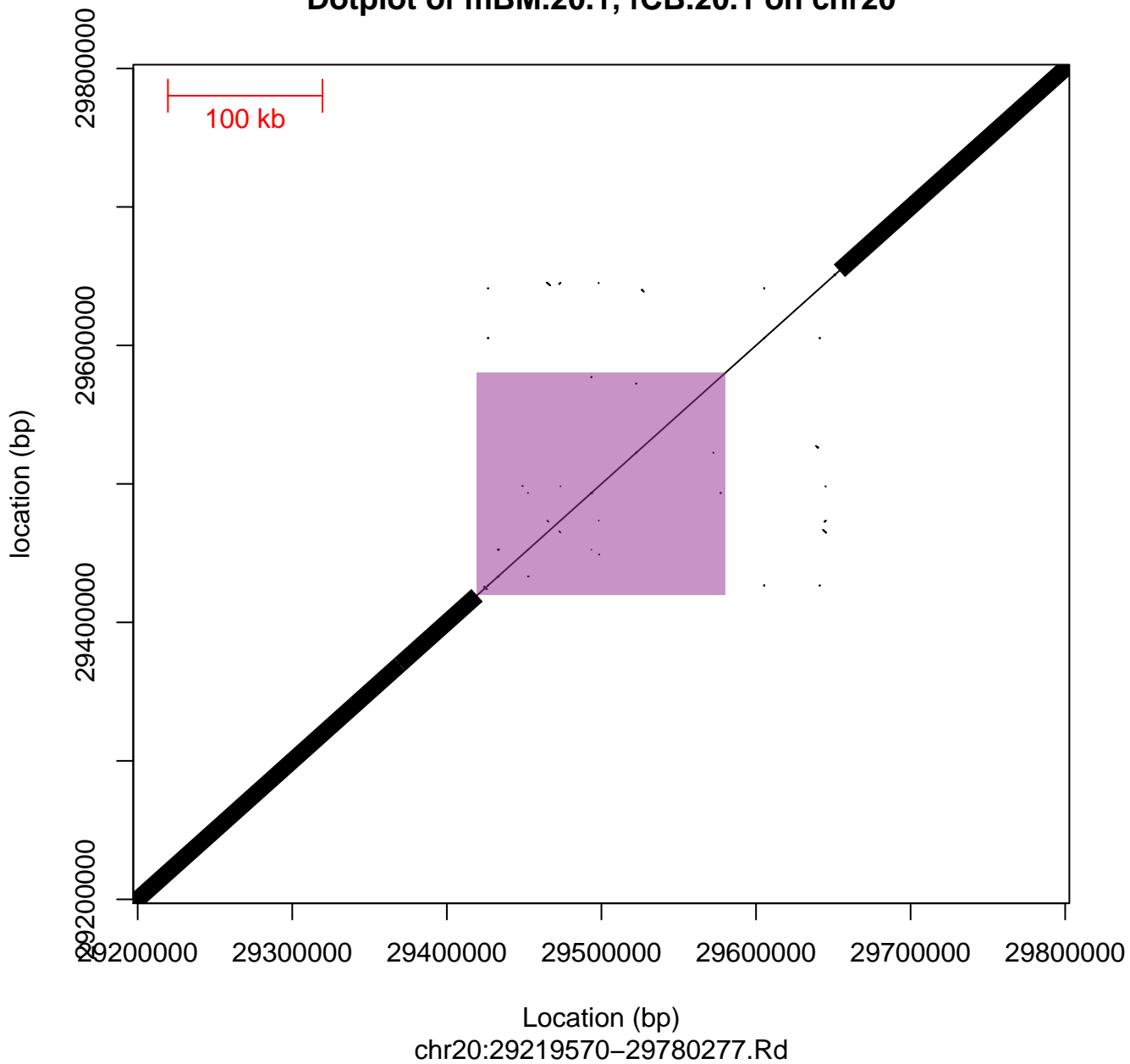
Dotplot of ROI No.20.1 on chr20



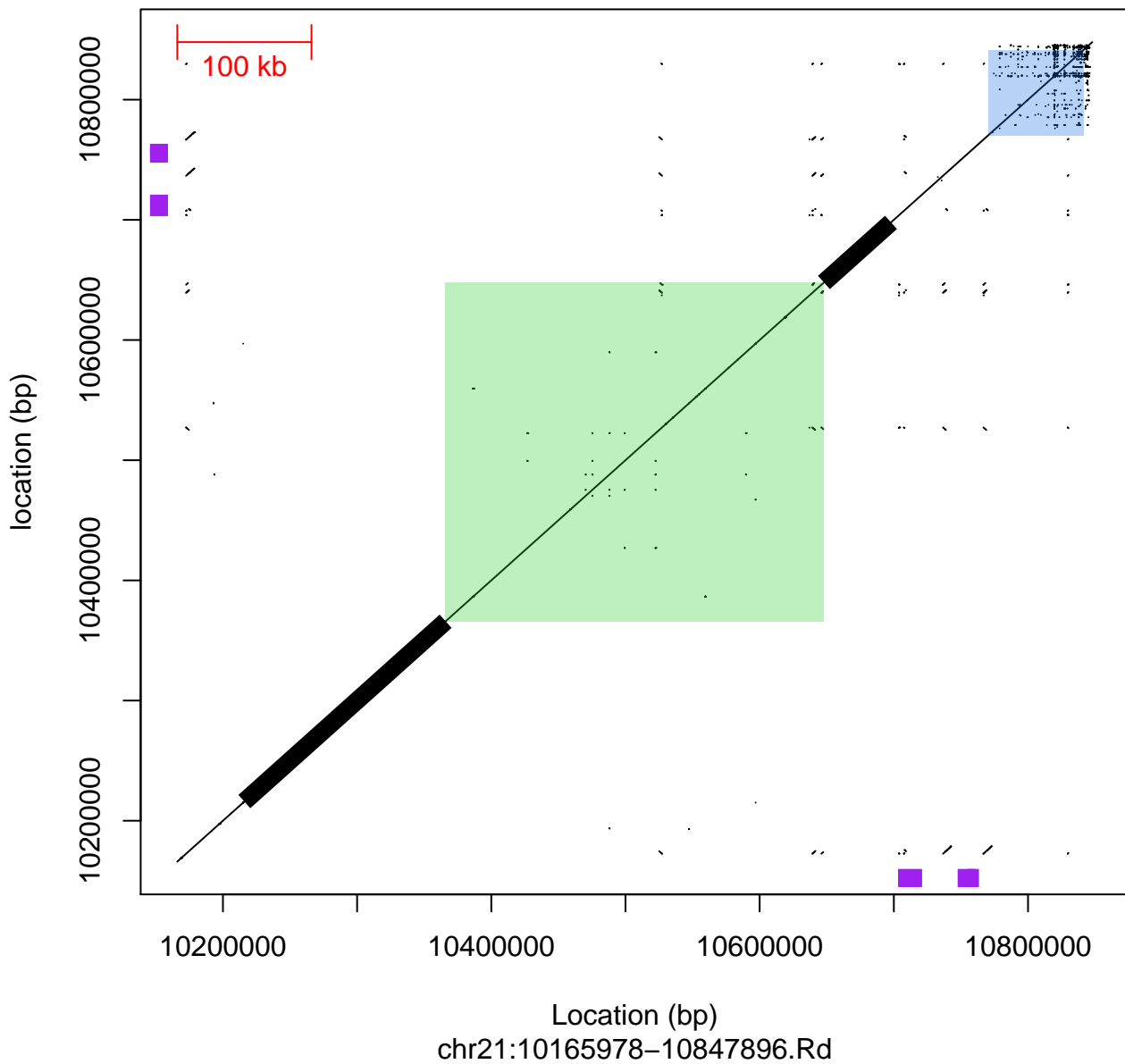
Dotplot of ROI No.20.2 on chr20



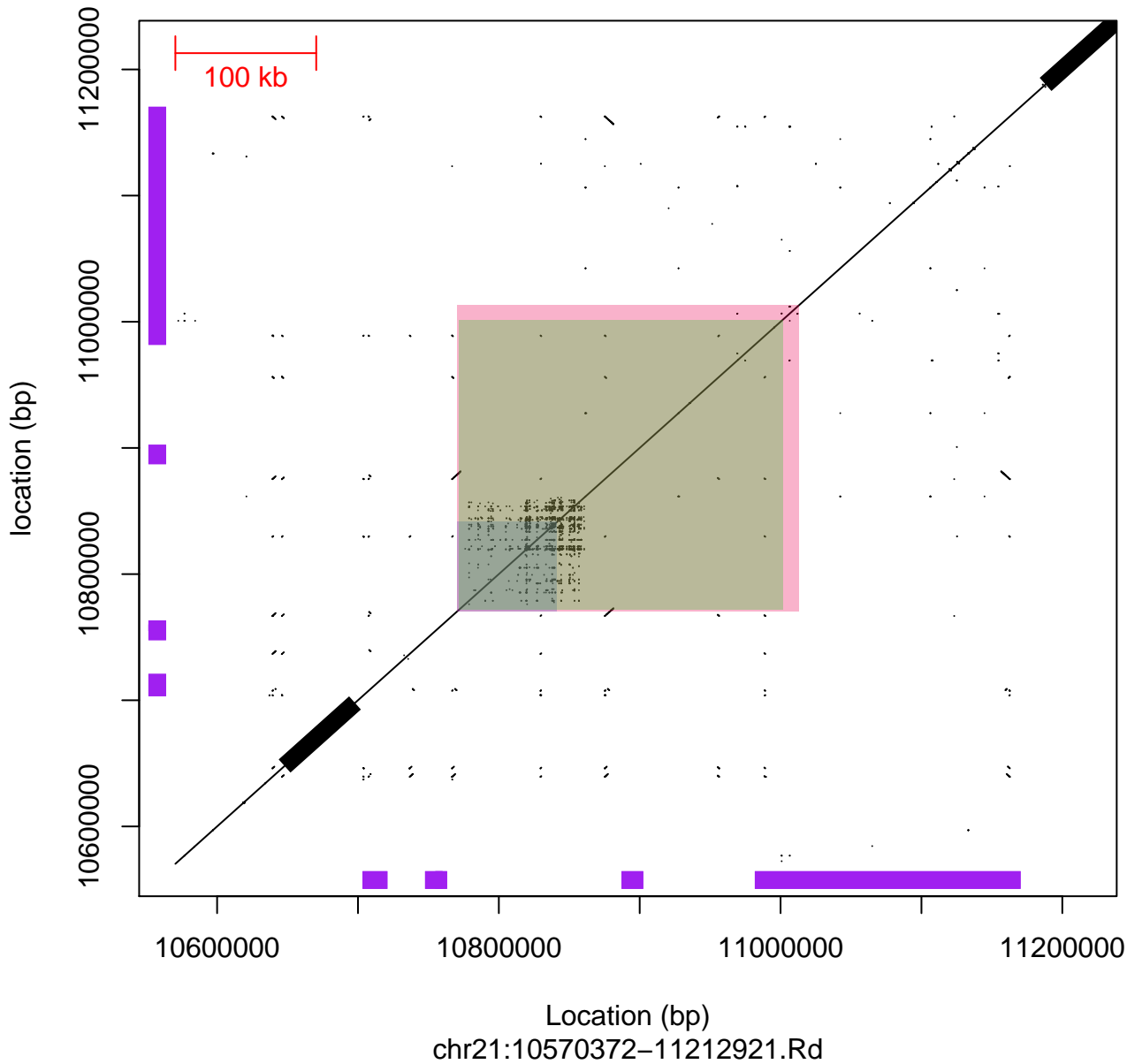
Dotplot of mBM.20.1, fCB.20.1 on chr20



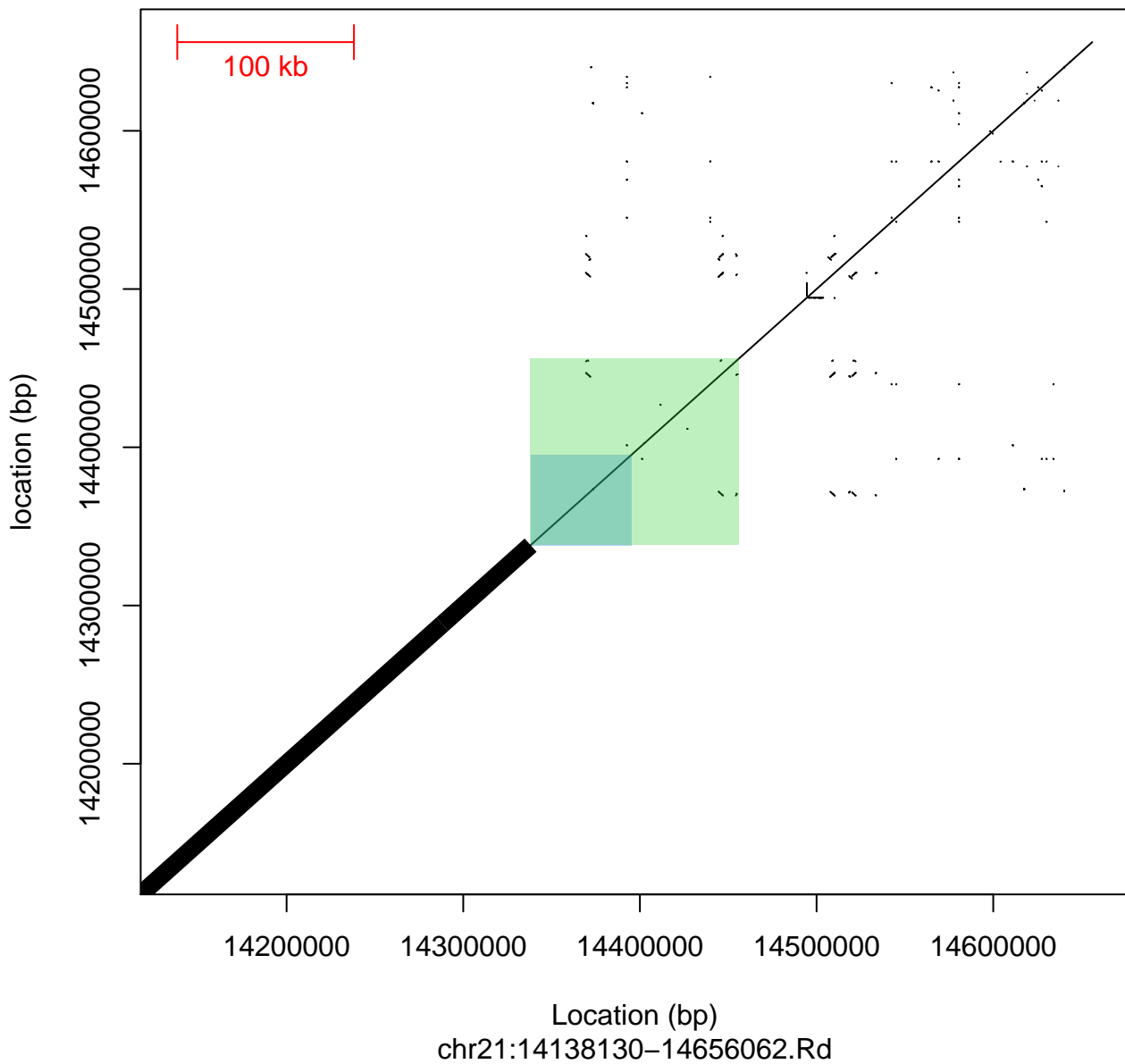
Dotplot of mBM.21.1, ROIno.21.2 on chr21



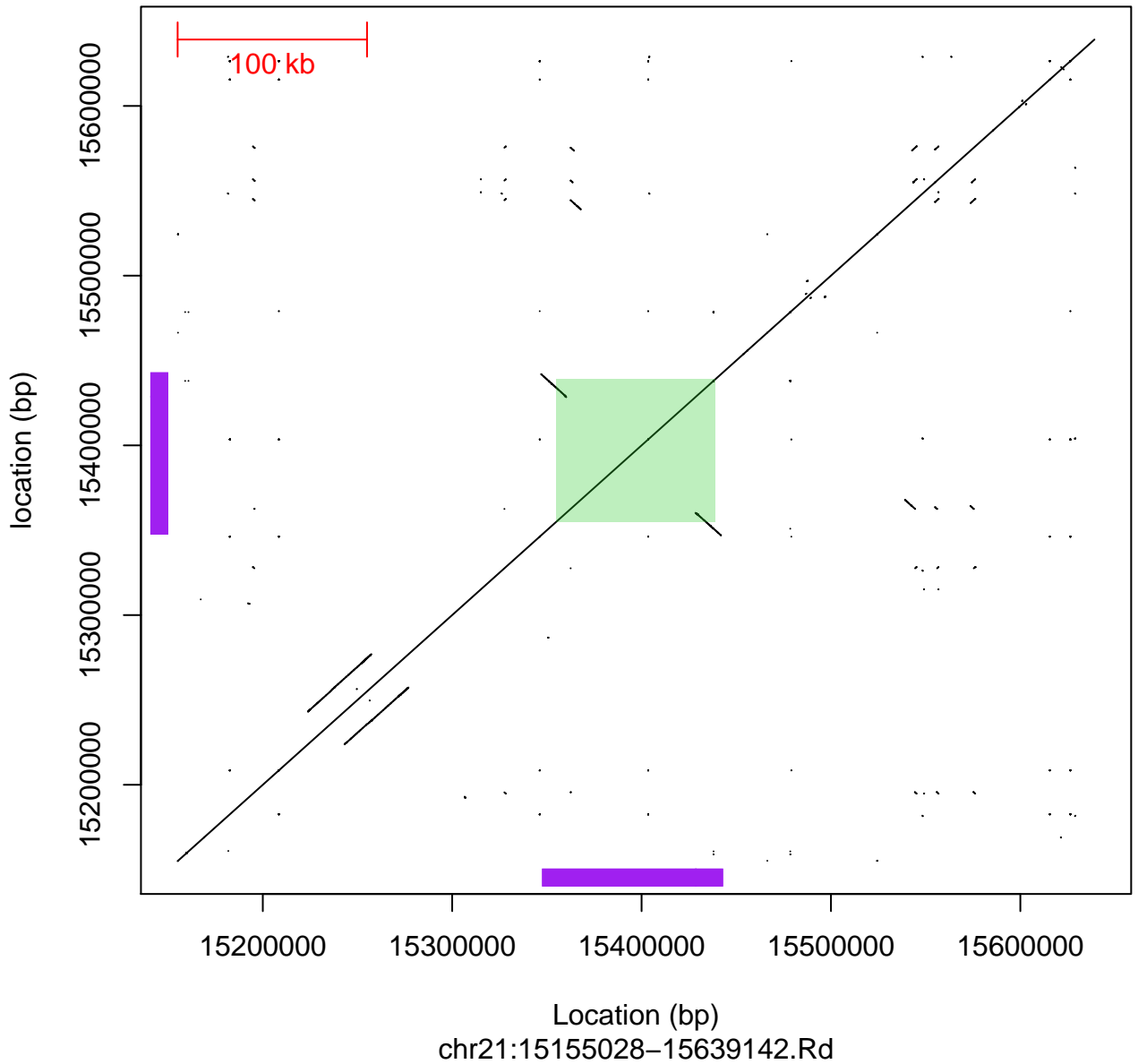
Dotplot of mBM.21.1, fCB.21.1, ROIno.21.4 on chr21



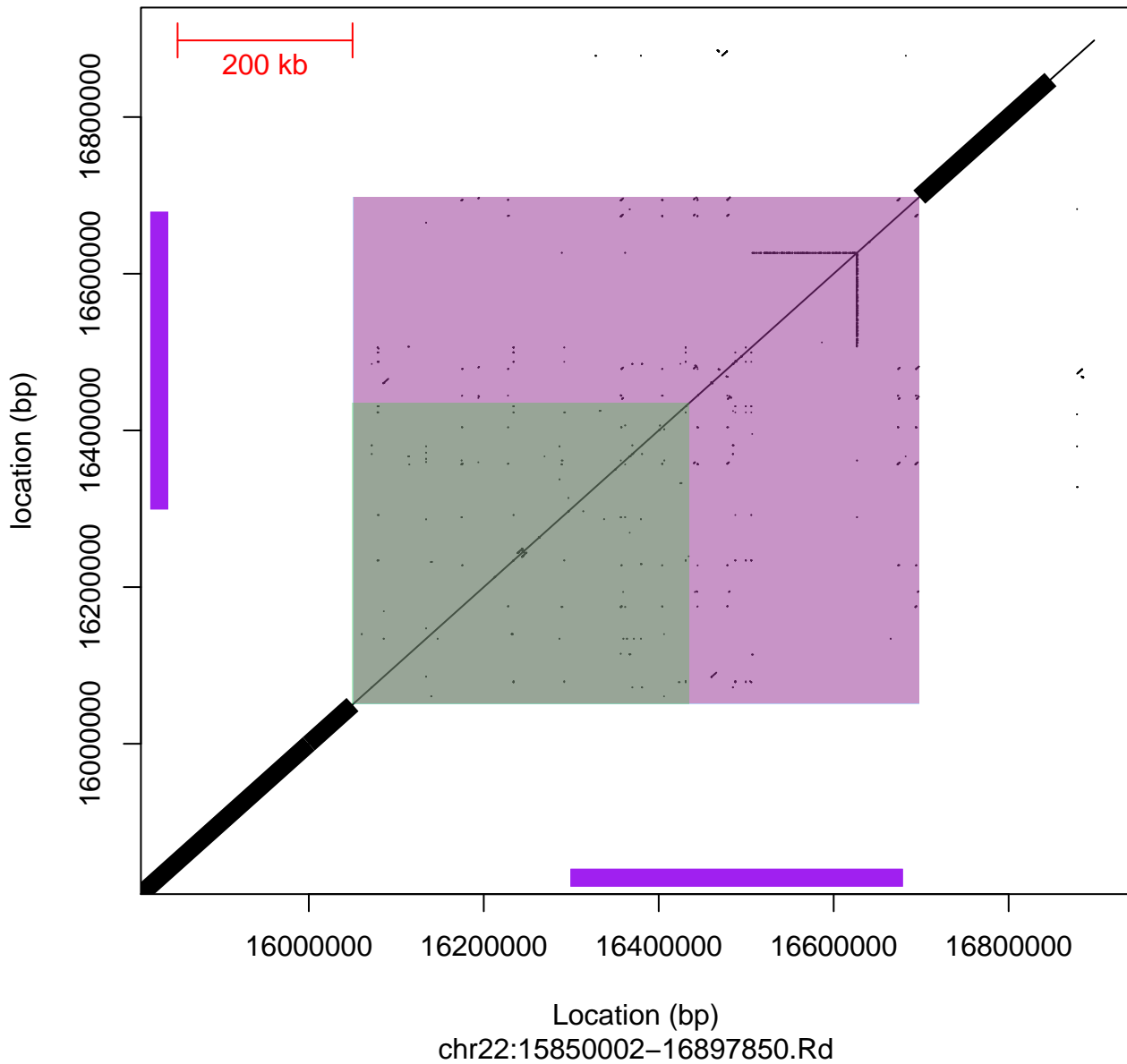
Dotplot of mBM.21.2, ROIno.21.6 on chr21



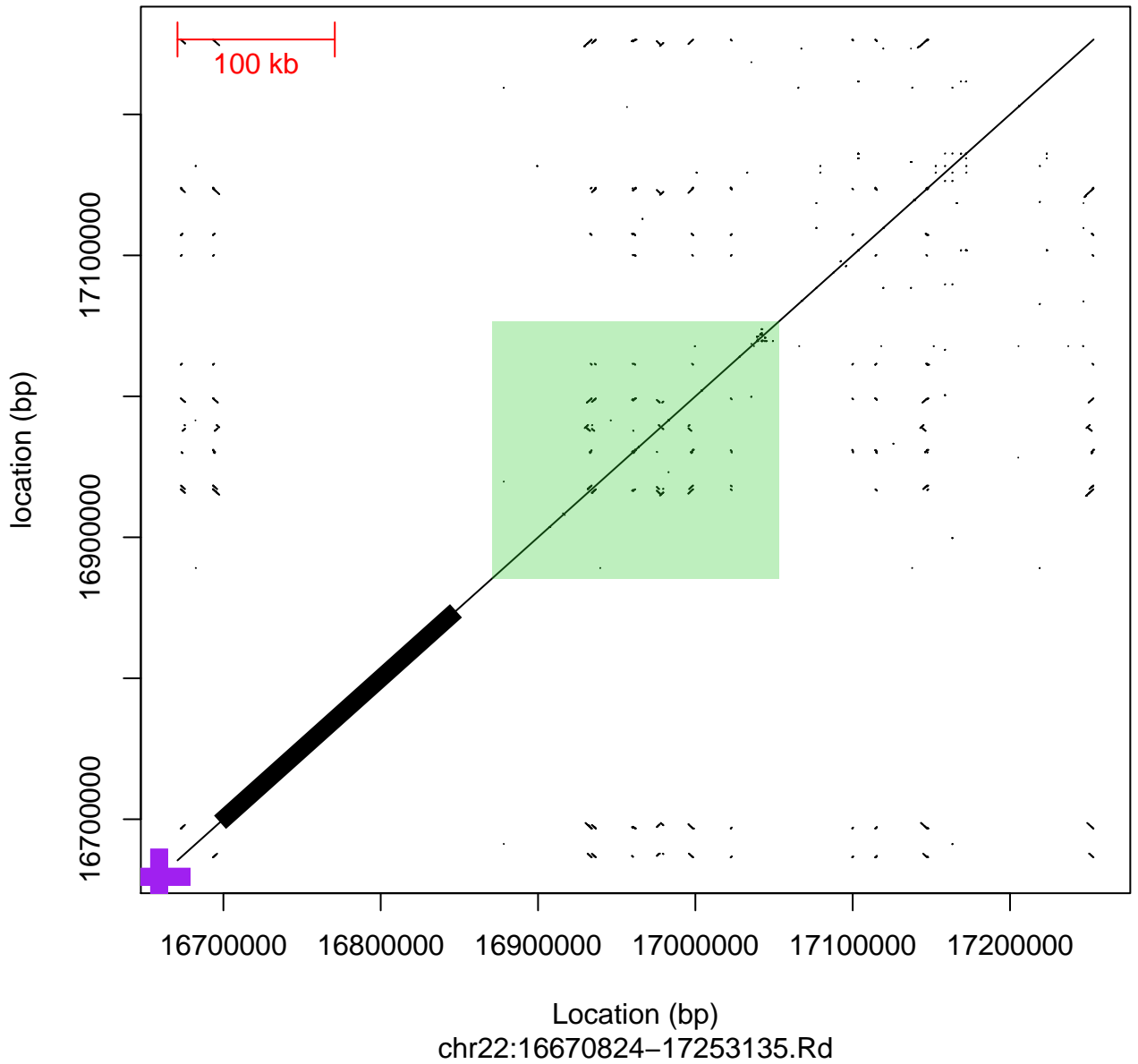
Dotplot of ROI No.21.7 on chr21



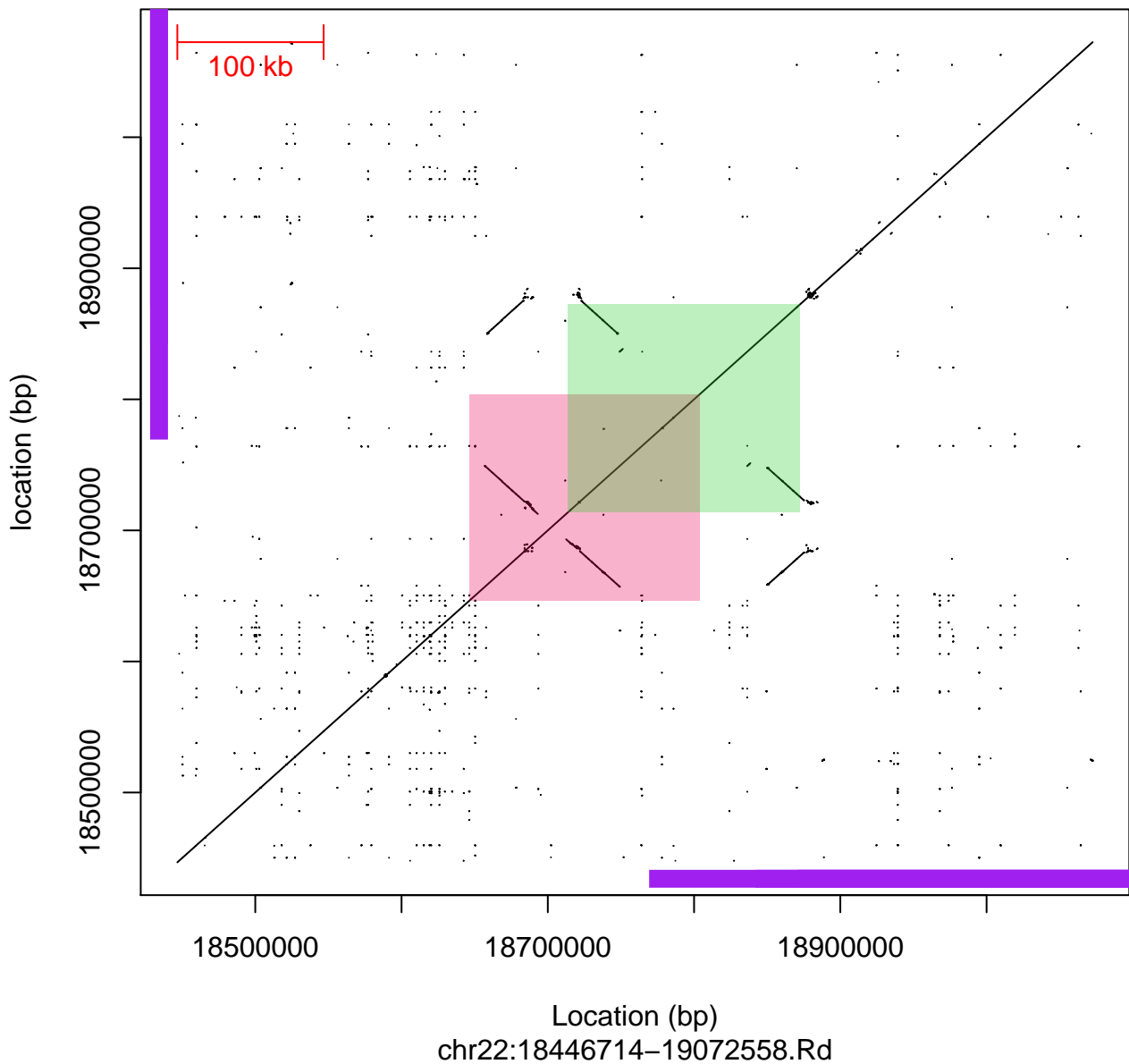
Dotplot of mBM.22.1, fCB.22.1, ROIno.22.1 on chr22



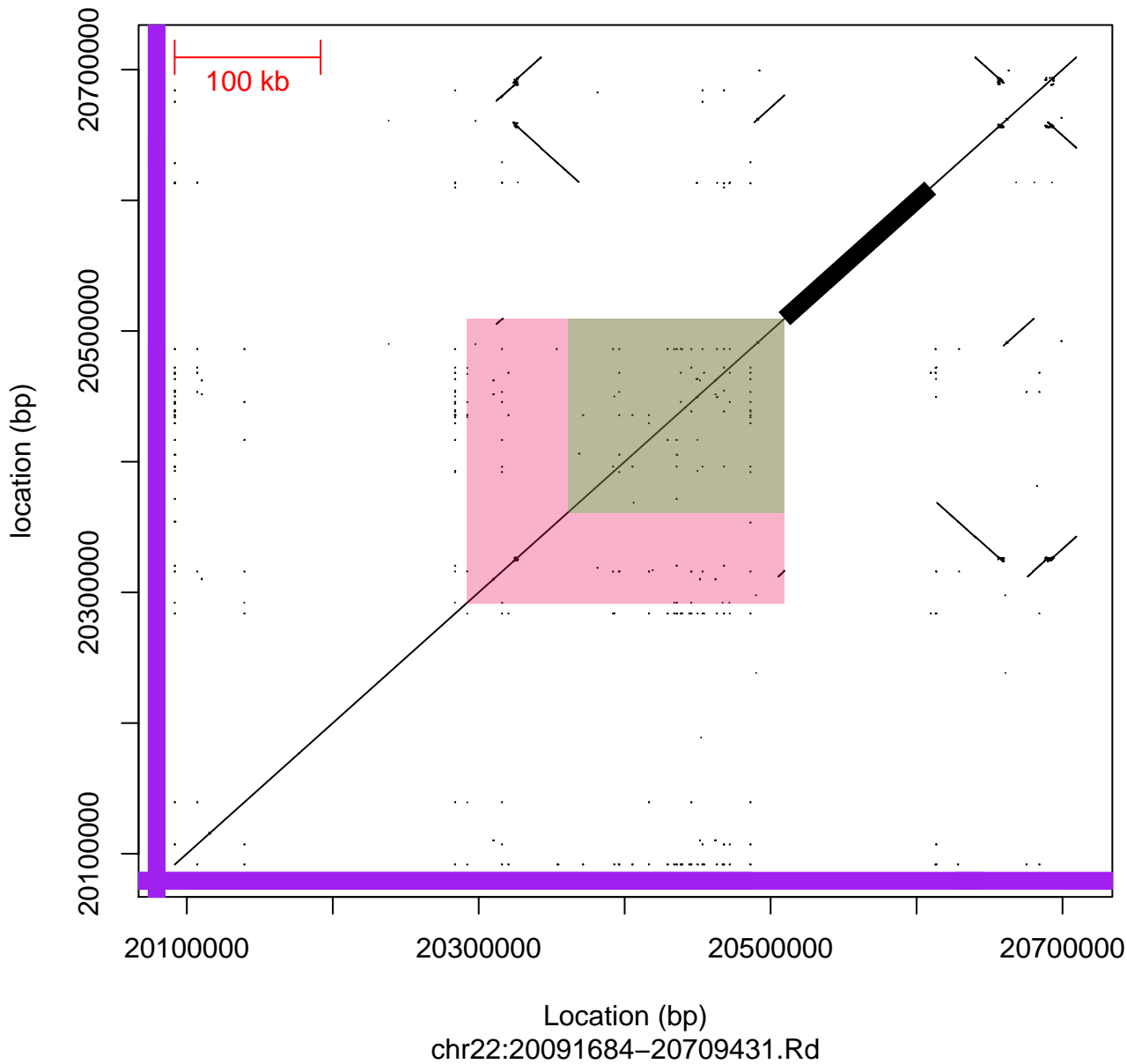
Dotplot of ROI No.22.3 on chr22



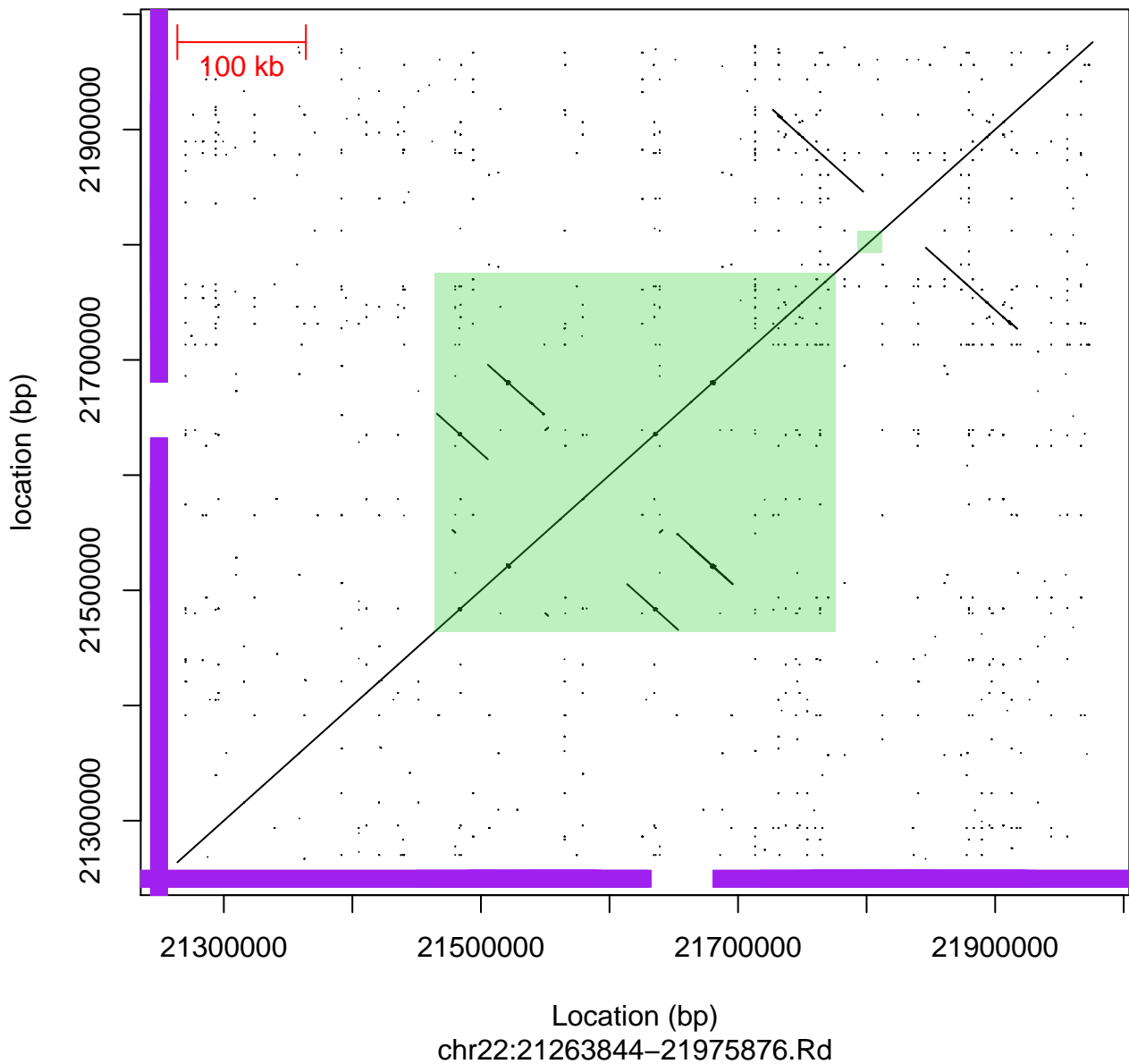
Dotplot of fCB.22.2, ROIno.22.4 on chr22



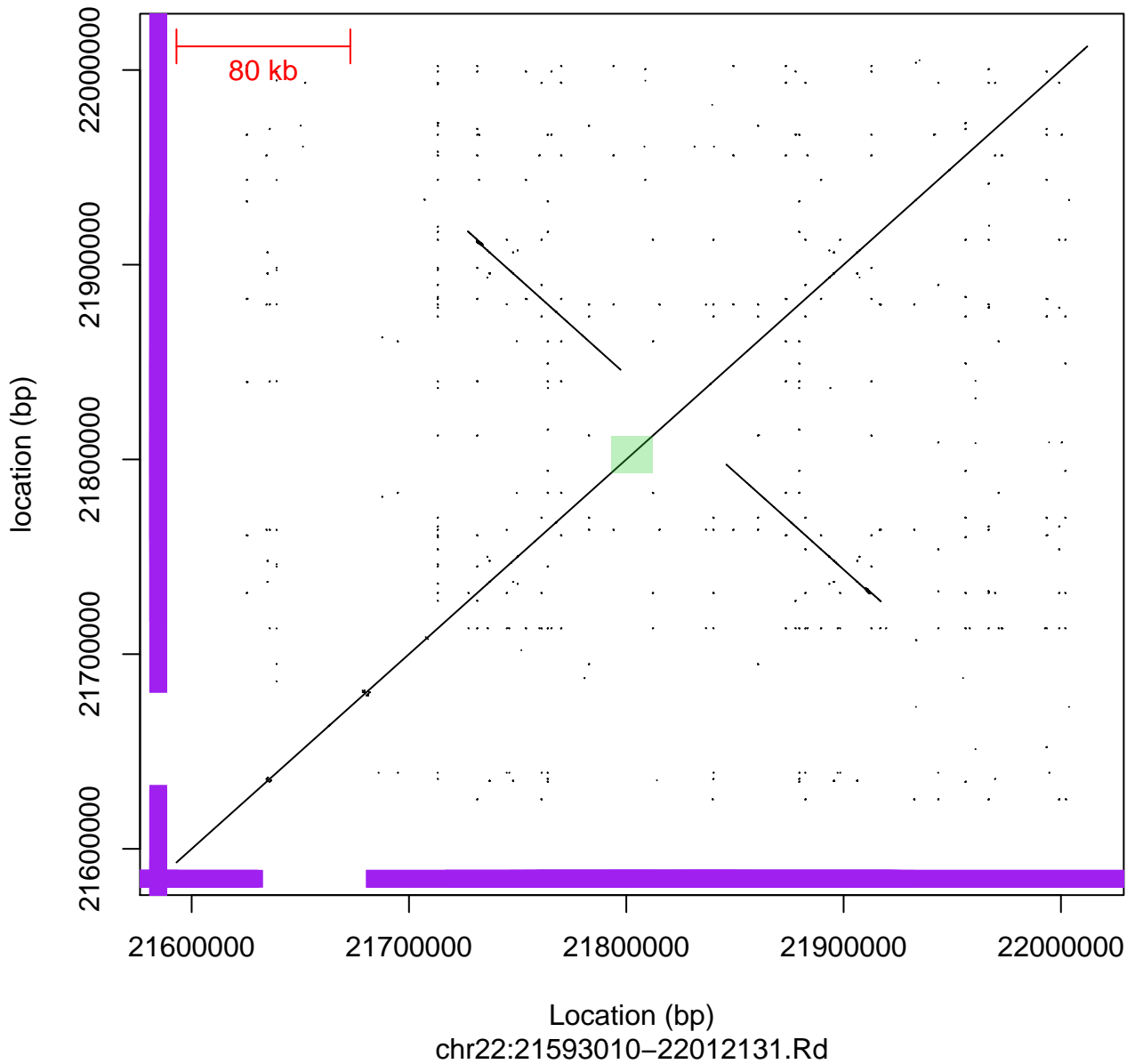
Dotplot of fCB.22.3, ROIno.22.5 on chr22



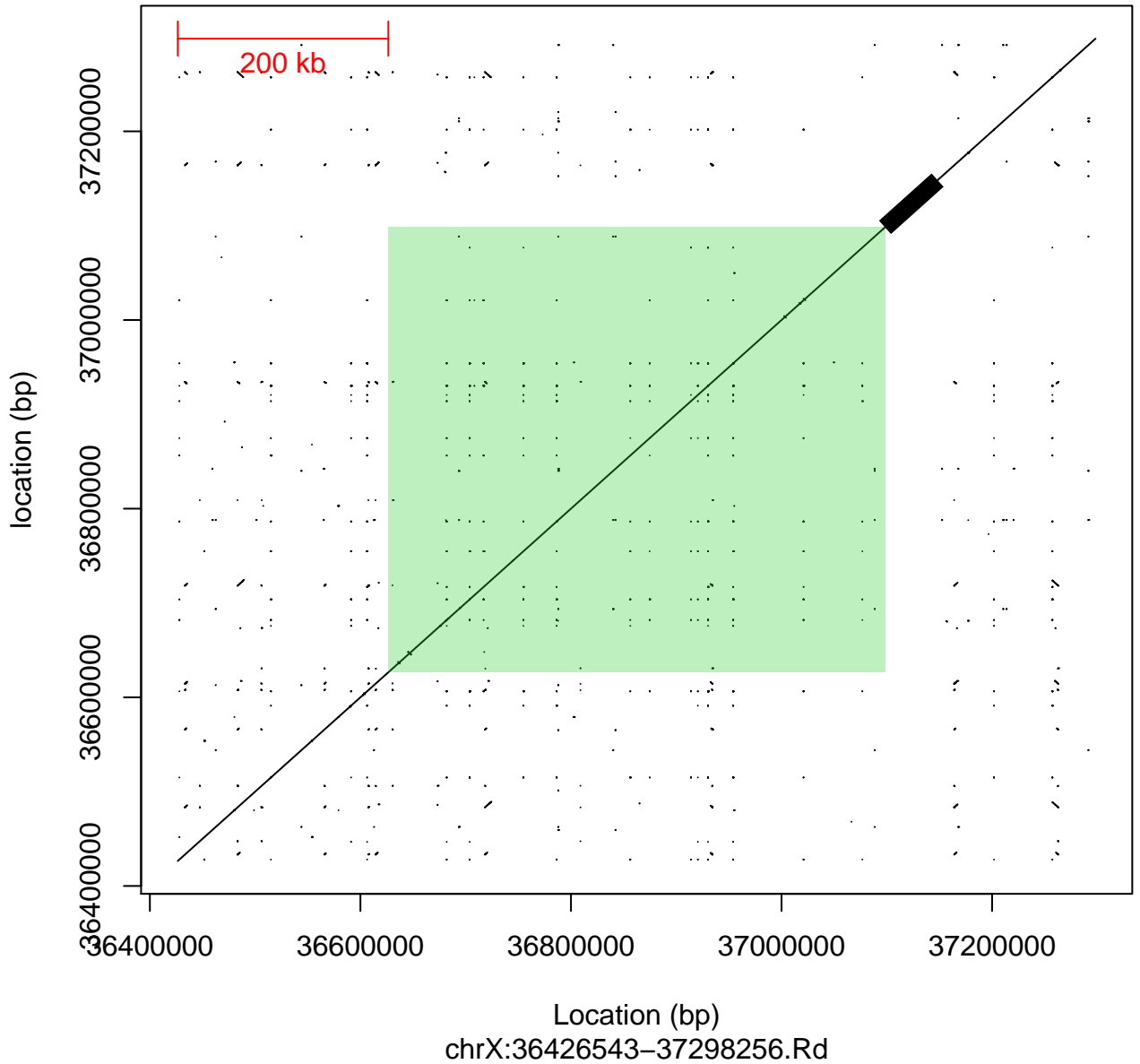
Dotplot of ROIno.22.7, ROIno.22.8 on chr22



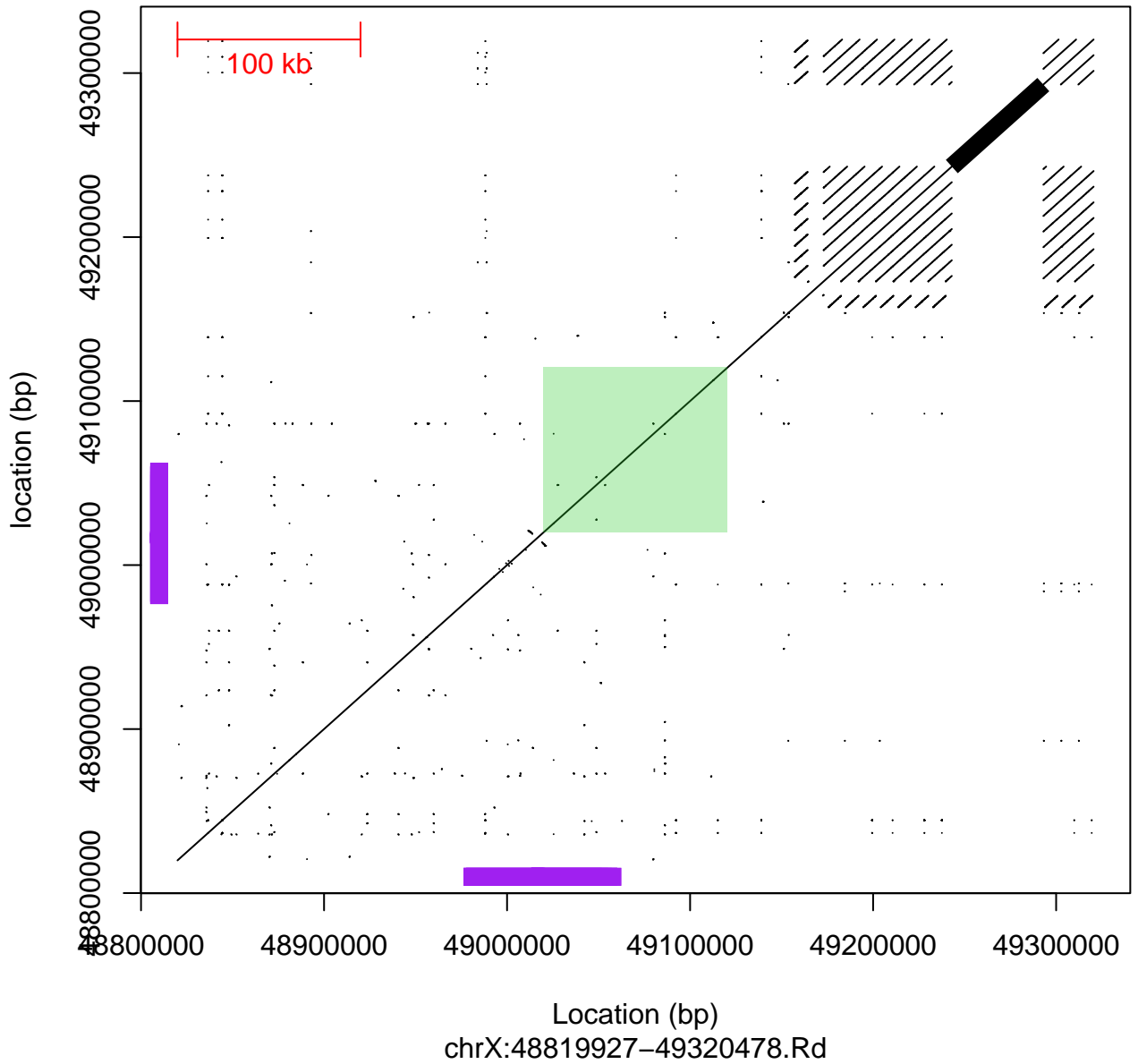
Dotplot of ROI No.22.8 on chr22



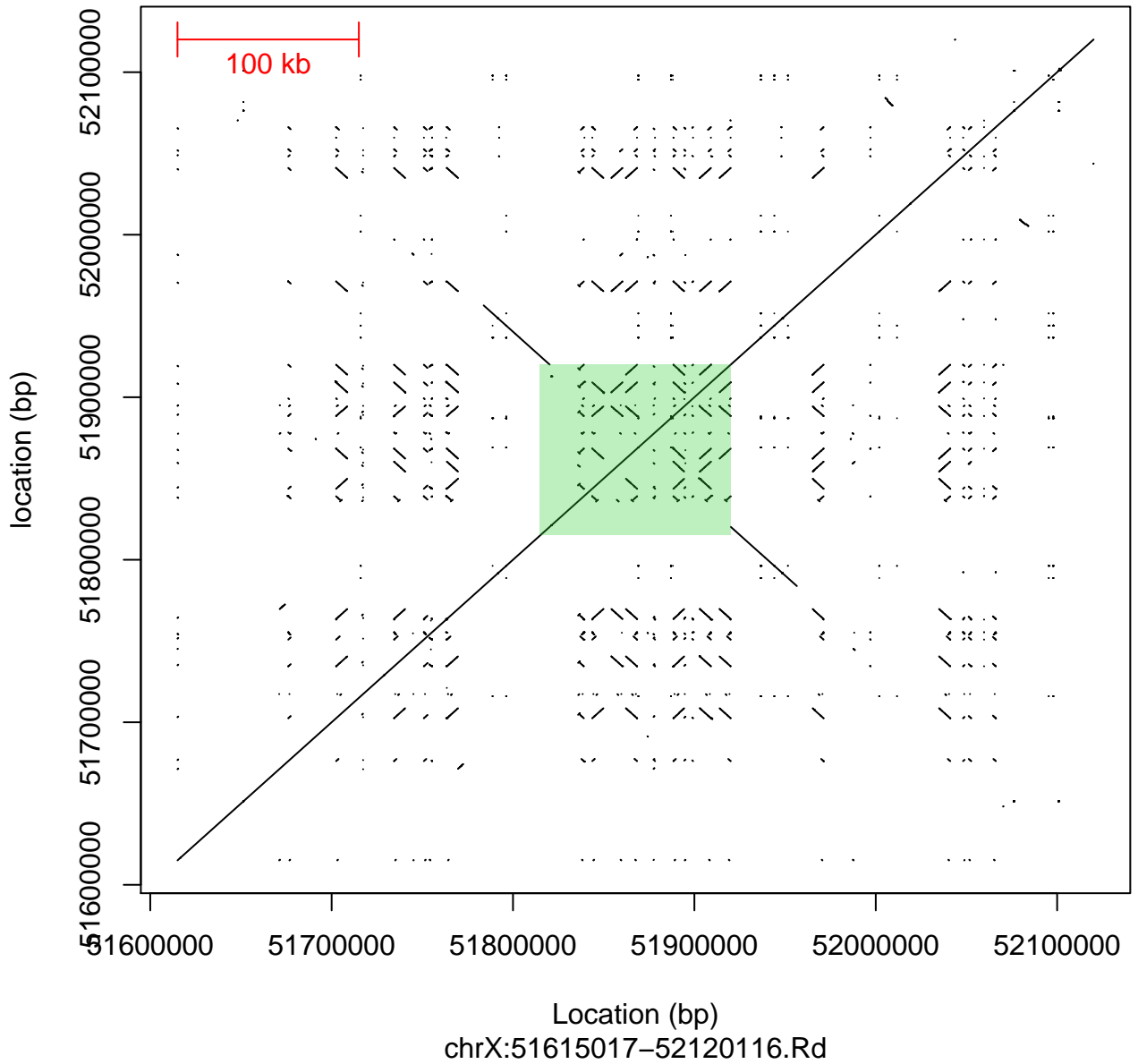
Dotplot of ROIno.X.4 on chrX



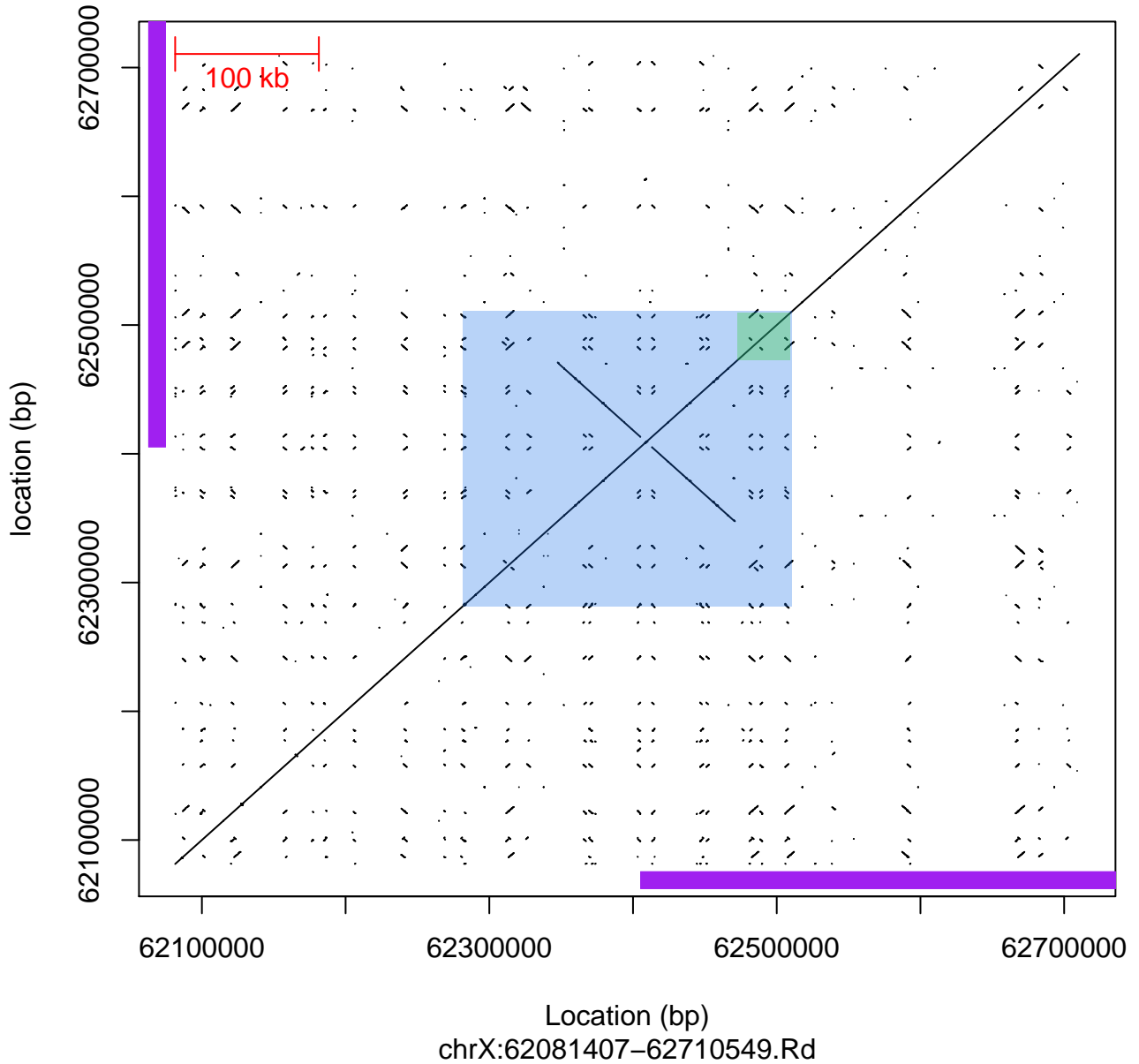
Dotplot of ROIno.X.12 on chrX



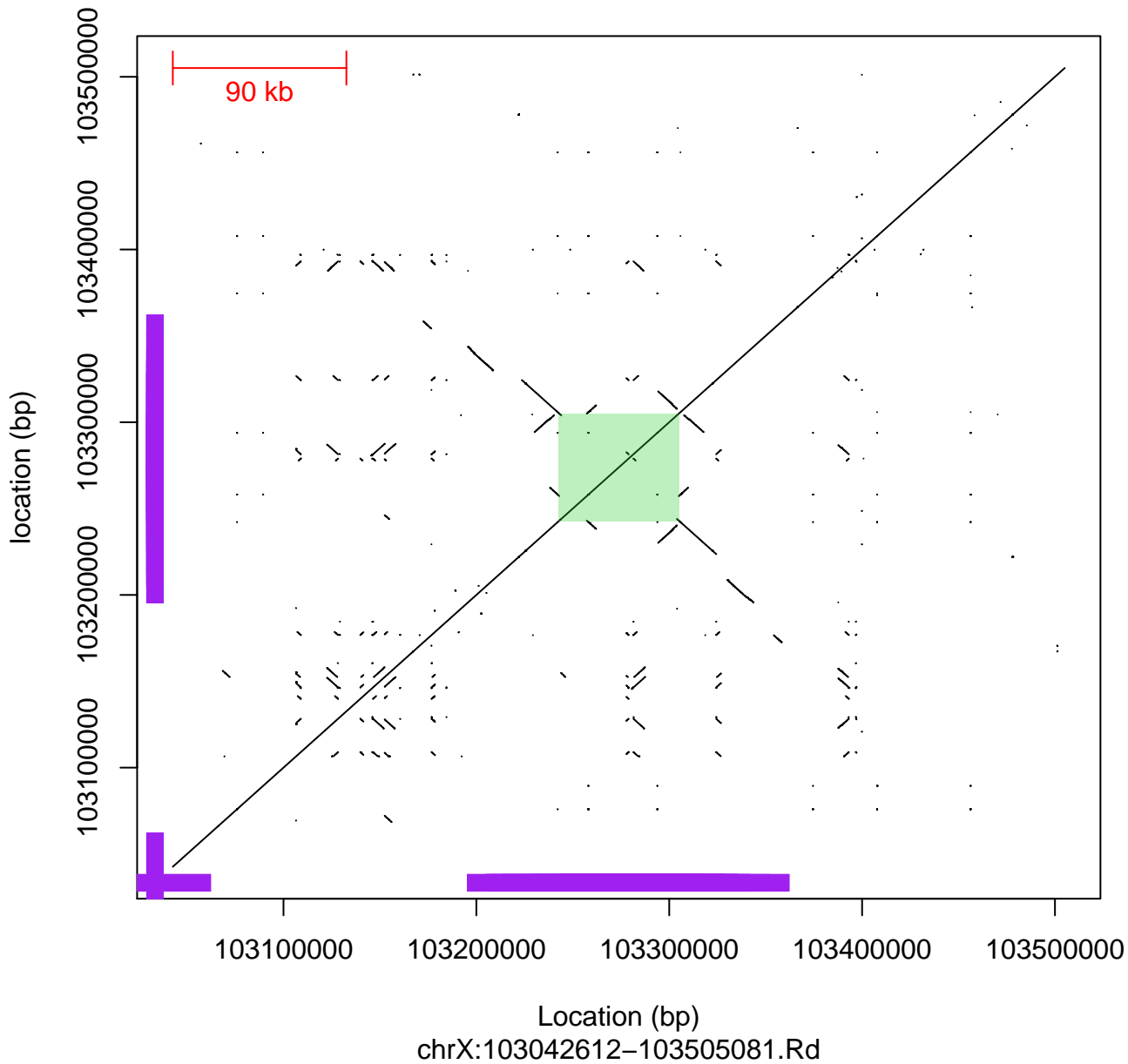
Dotplot of ROIno.X.15 on chrX



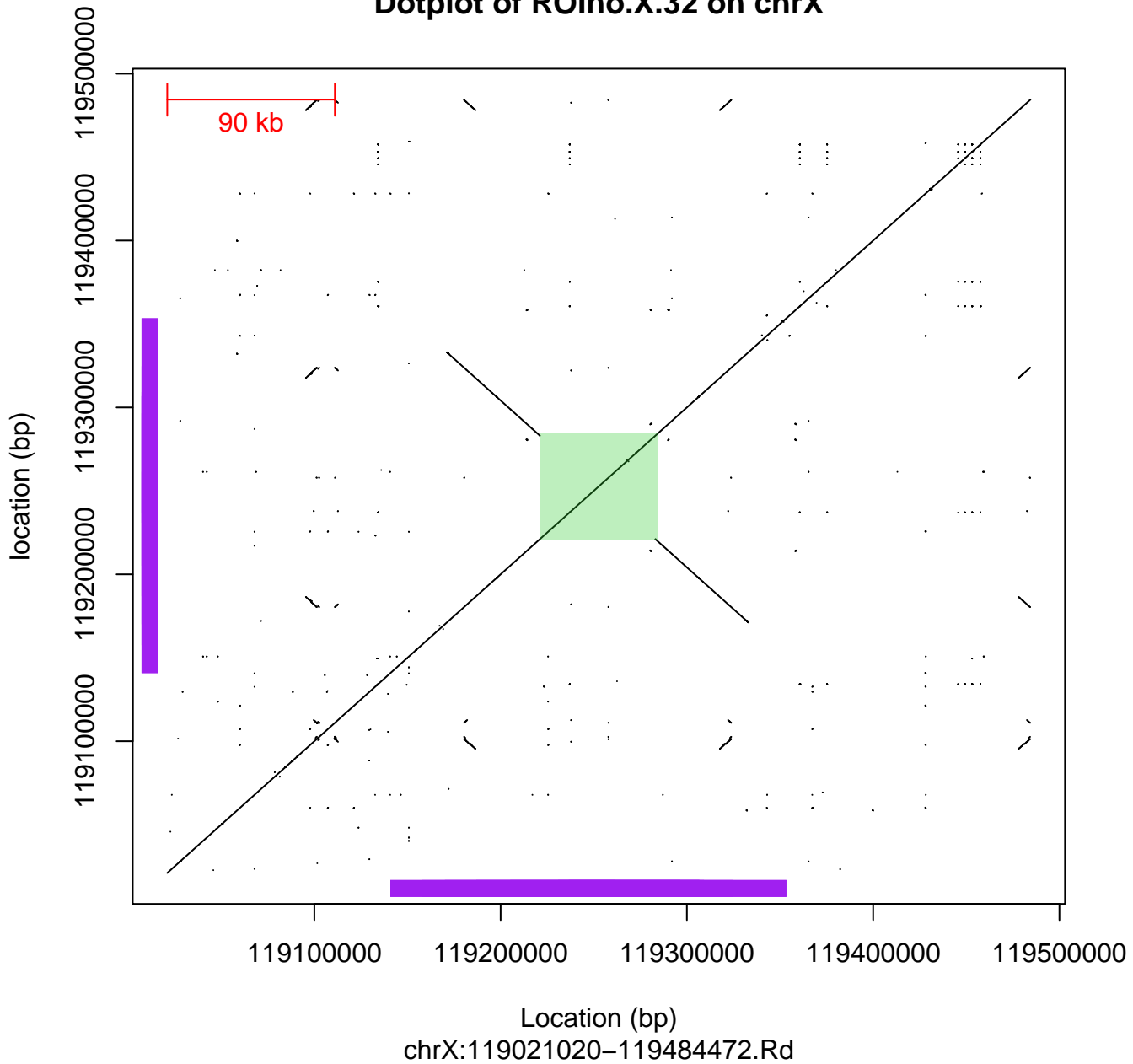
Dotplot of mBM.X.1, ROI.No.X.22 on chrX



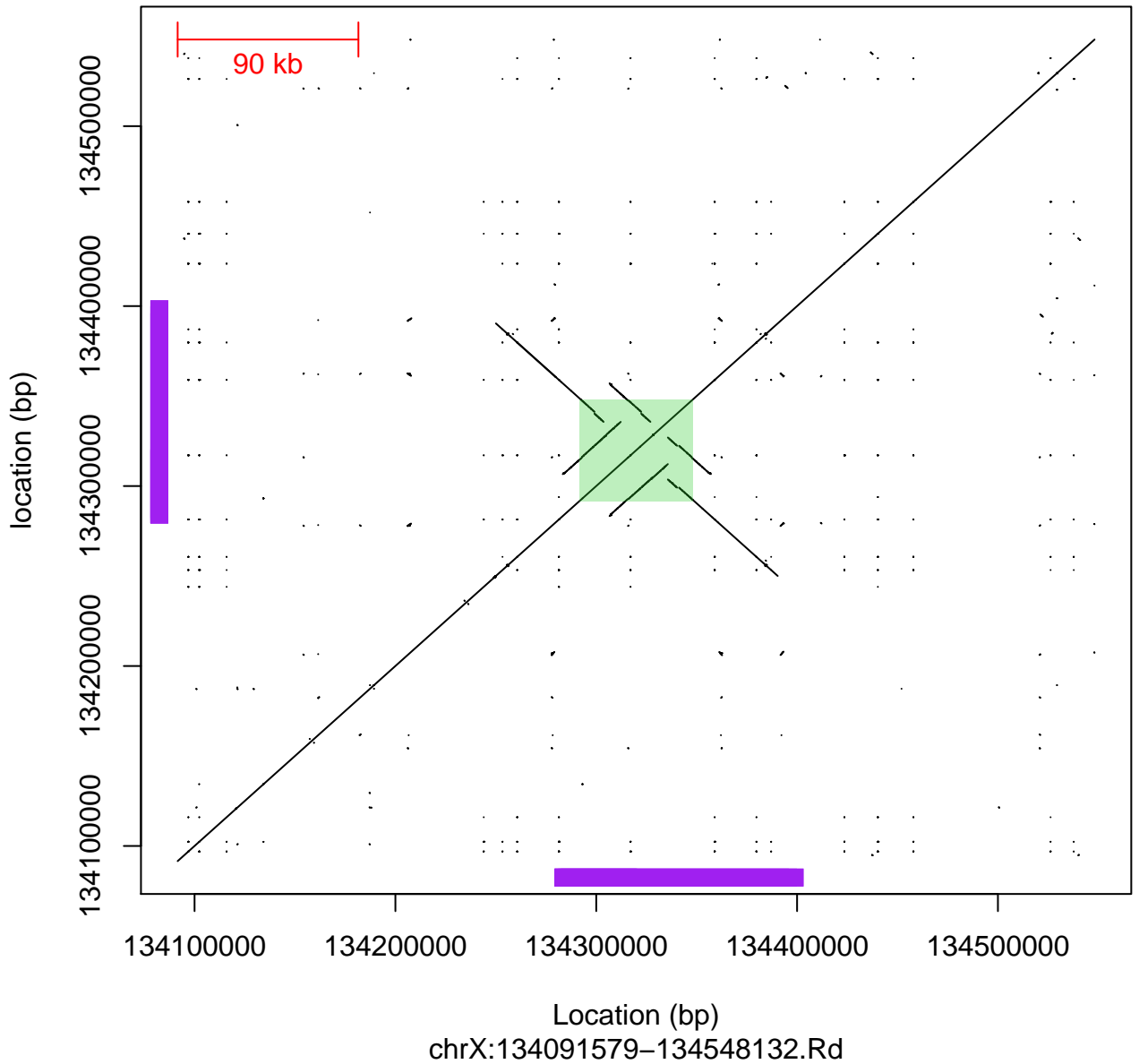
Dotplot of ROIno.X.30 on chrX



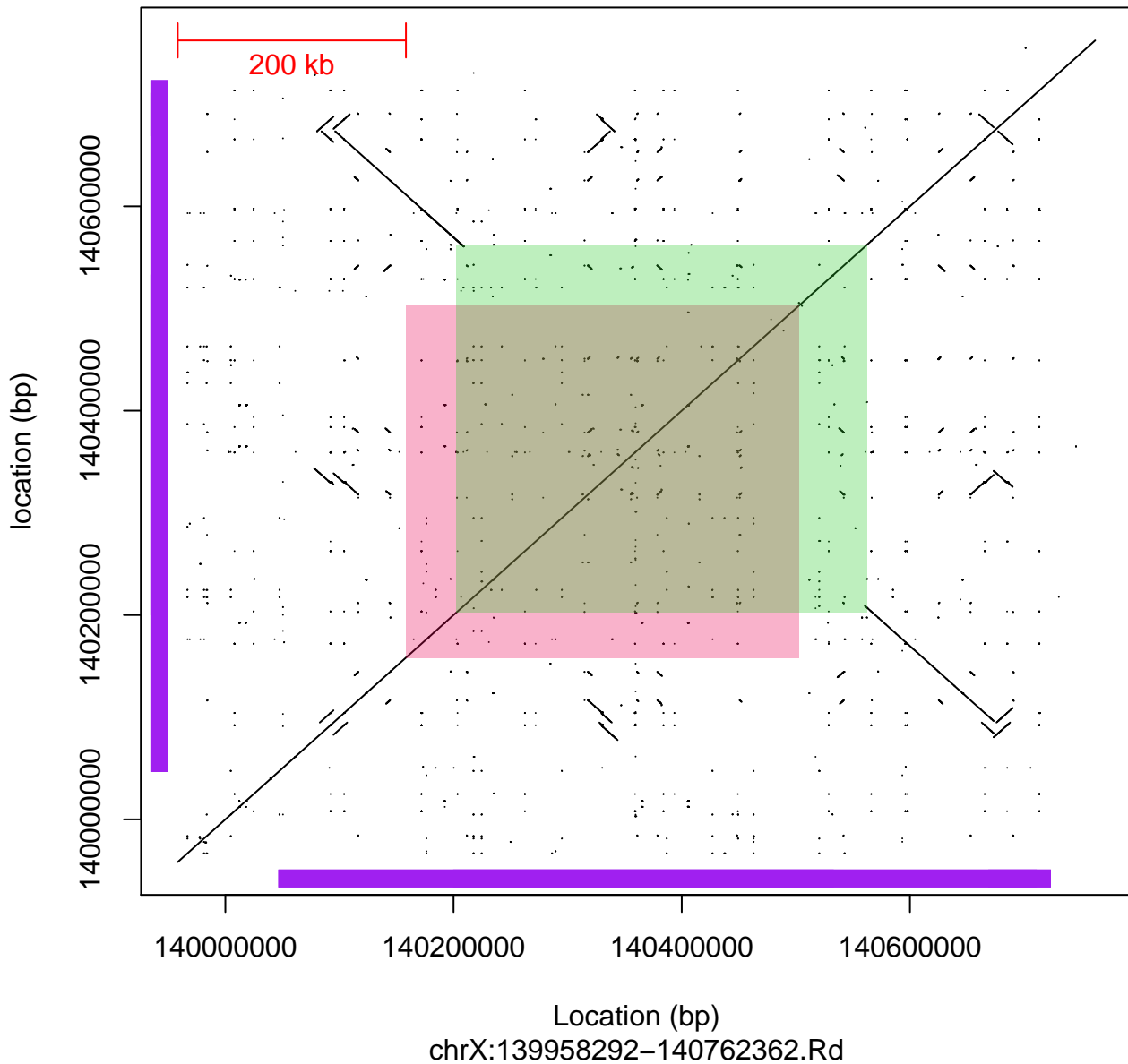
Dotplot of ROIno.X.32 on chrX



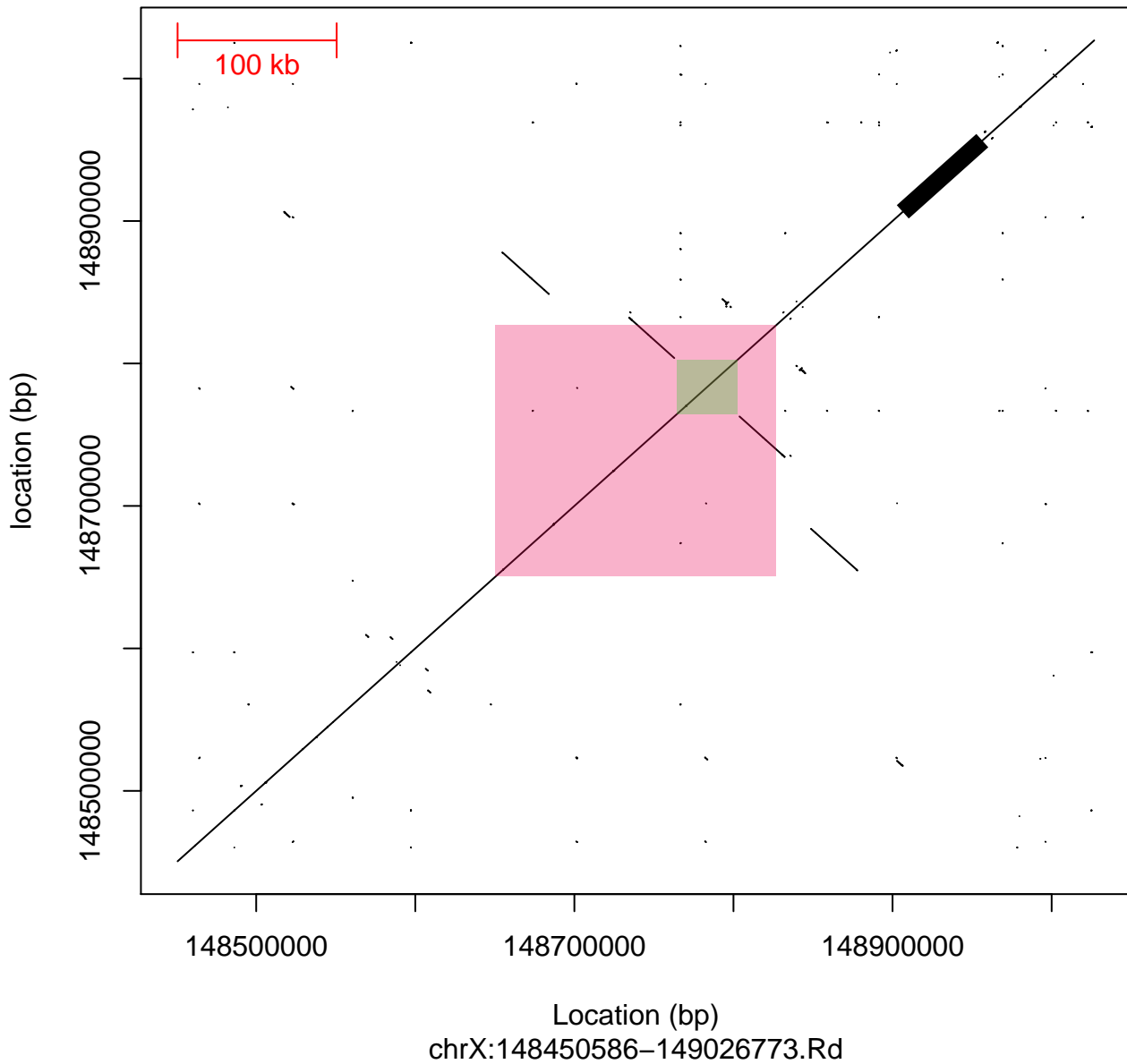
Dotplot of ROIno.X.36 on chrX



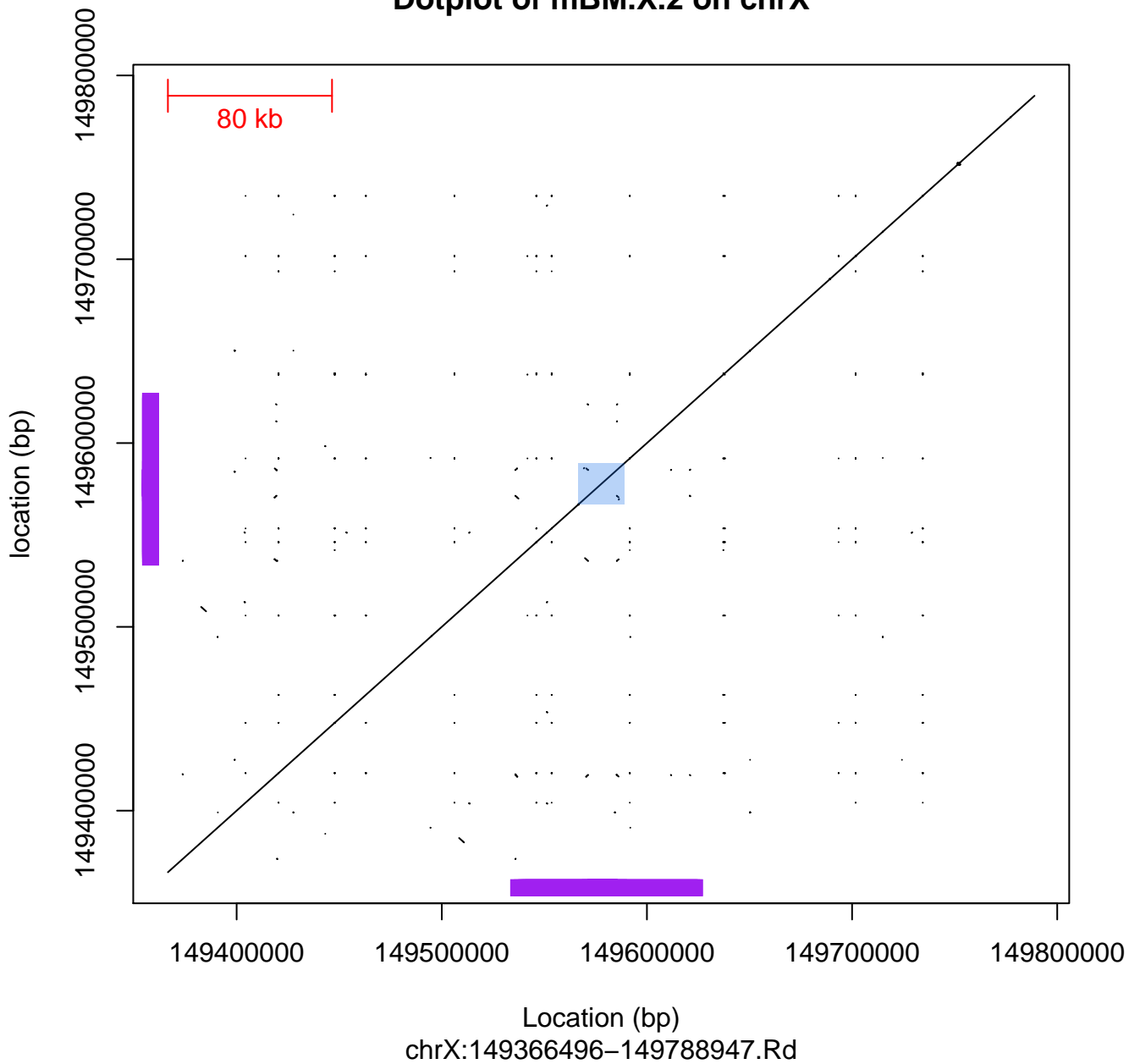
Dotplot of fCB.X.1, ROIno.X.40 on chrX



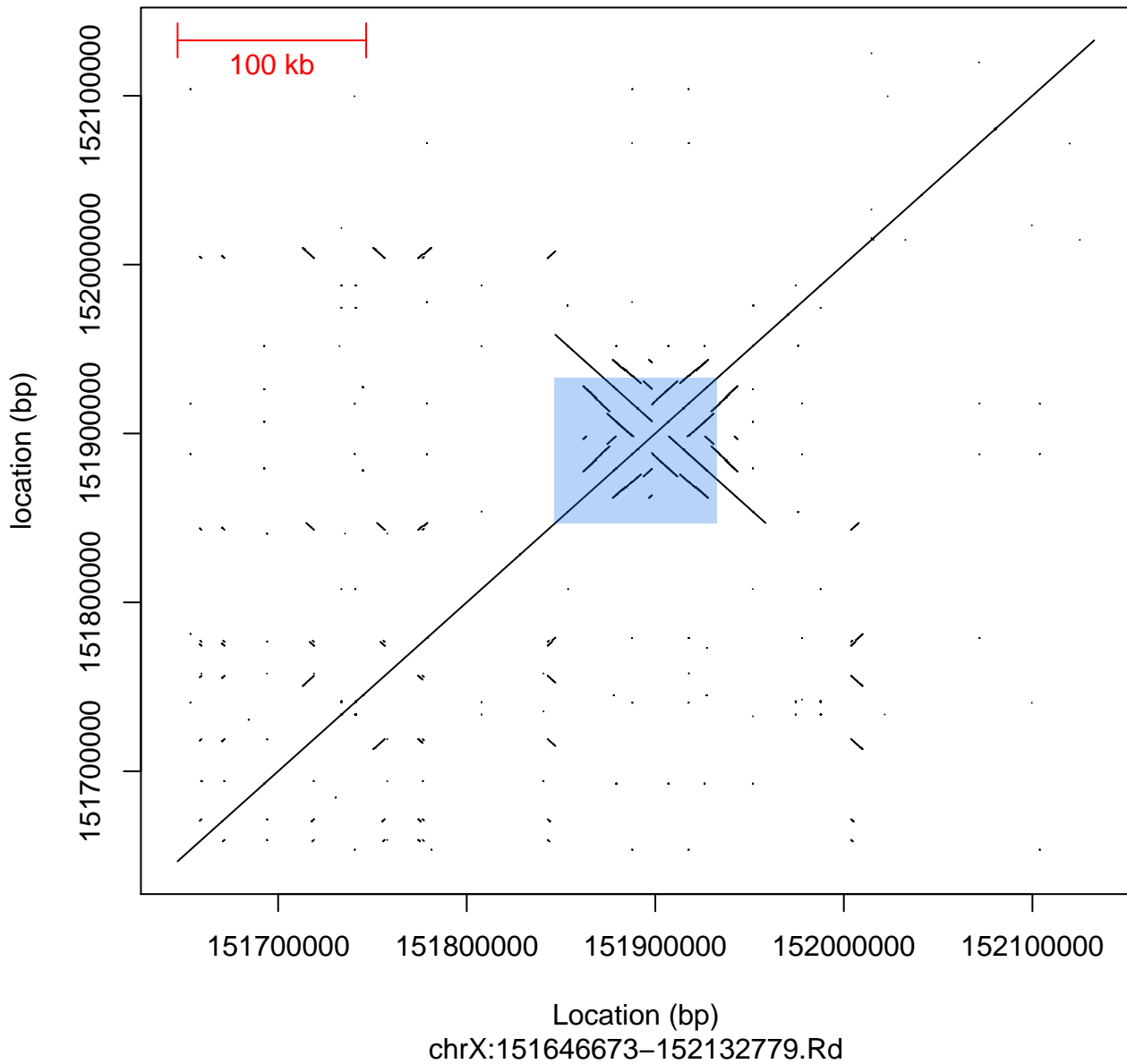
Dotplot of fCB.X.2, ROIno.X.42 on chrX



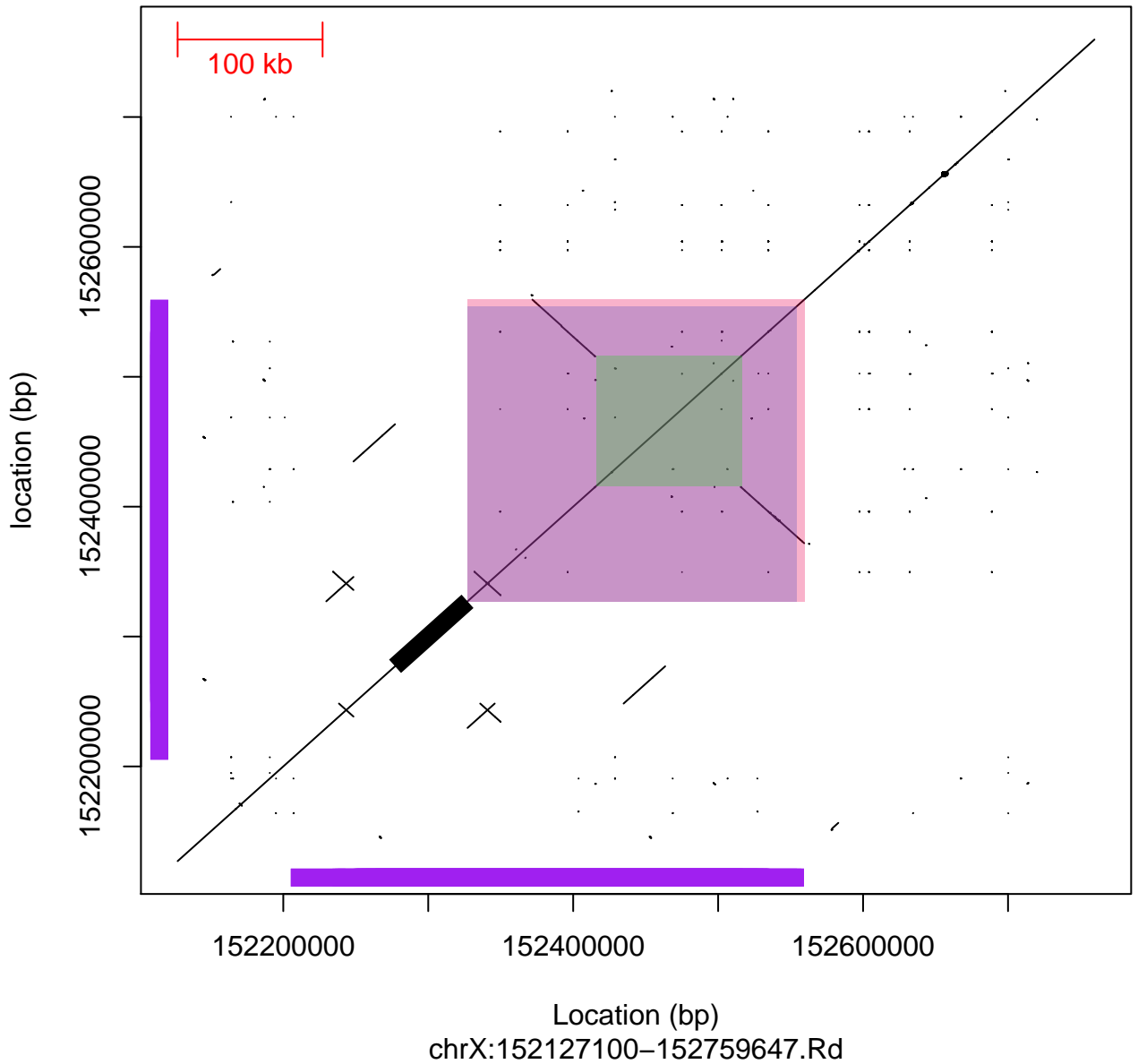
Dotplot of mBM.X.2 on chrX



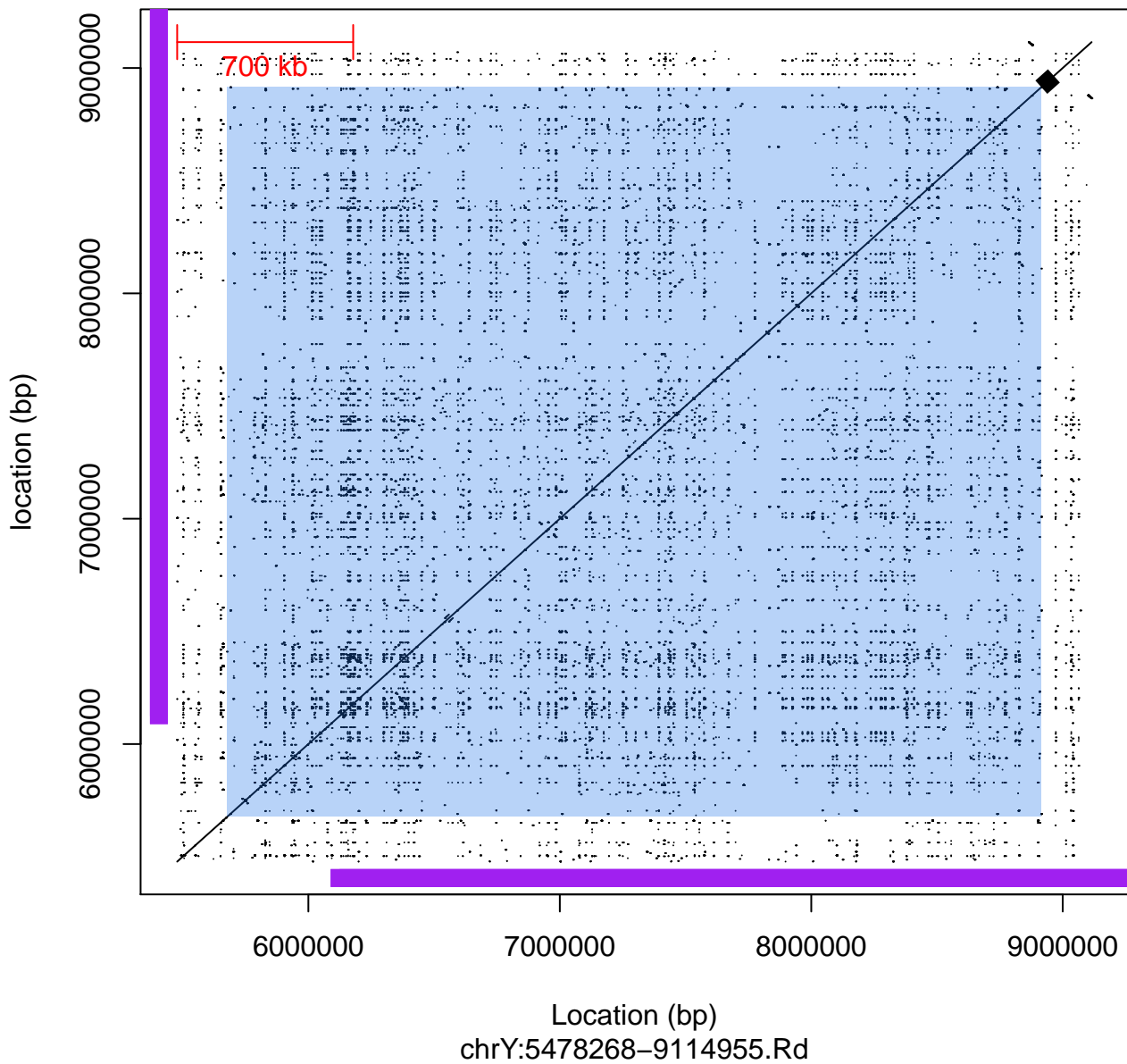
Dotplot of mBM.X.3 on chrX



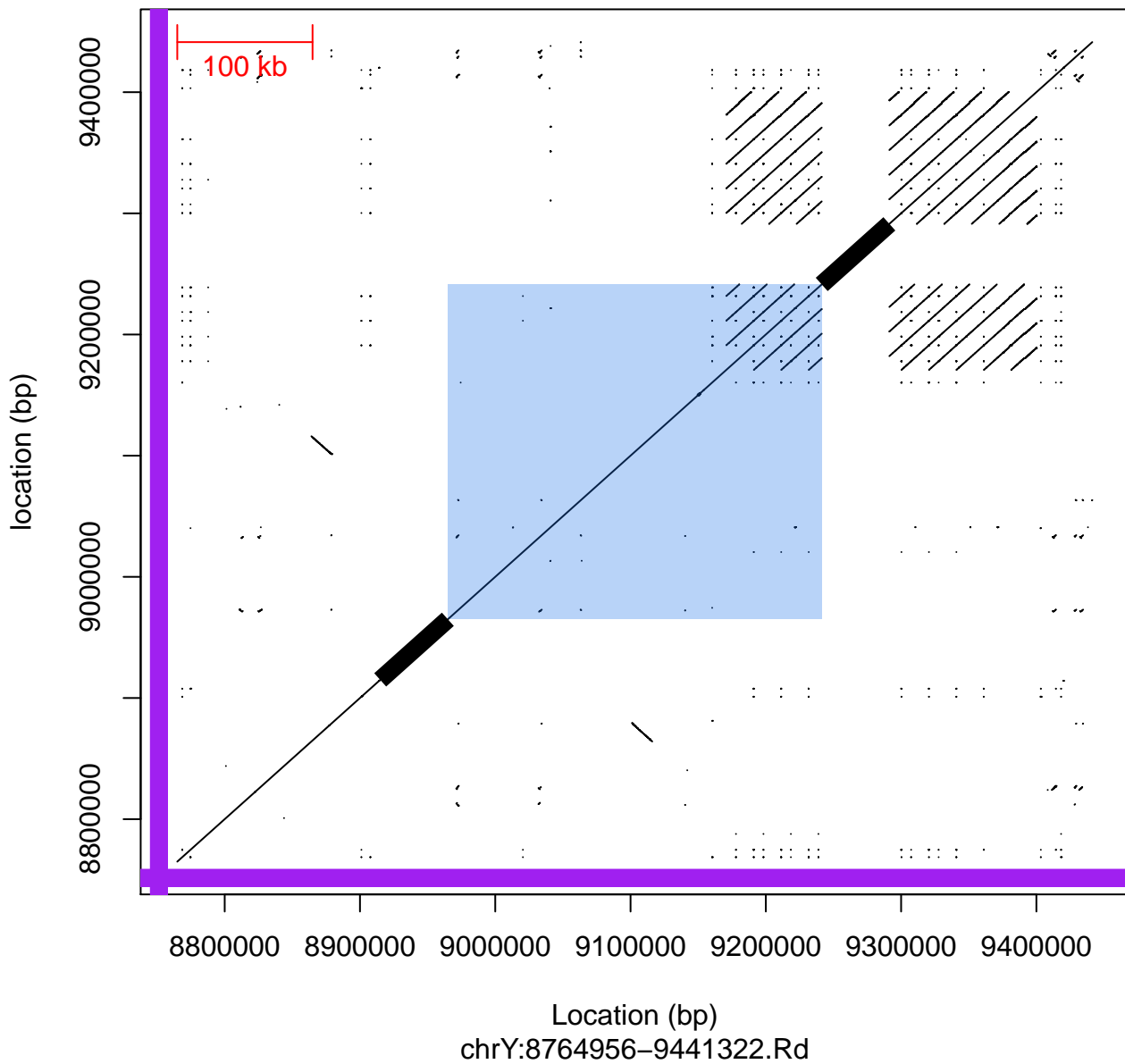
Dotplot of mBM.X.4, fCB.X.3, ROIno.X.48 on chrX



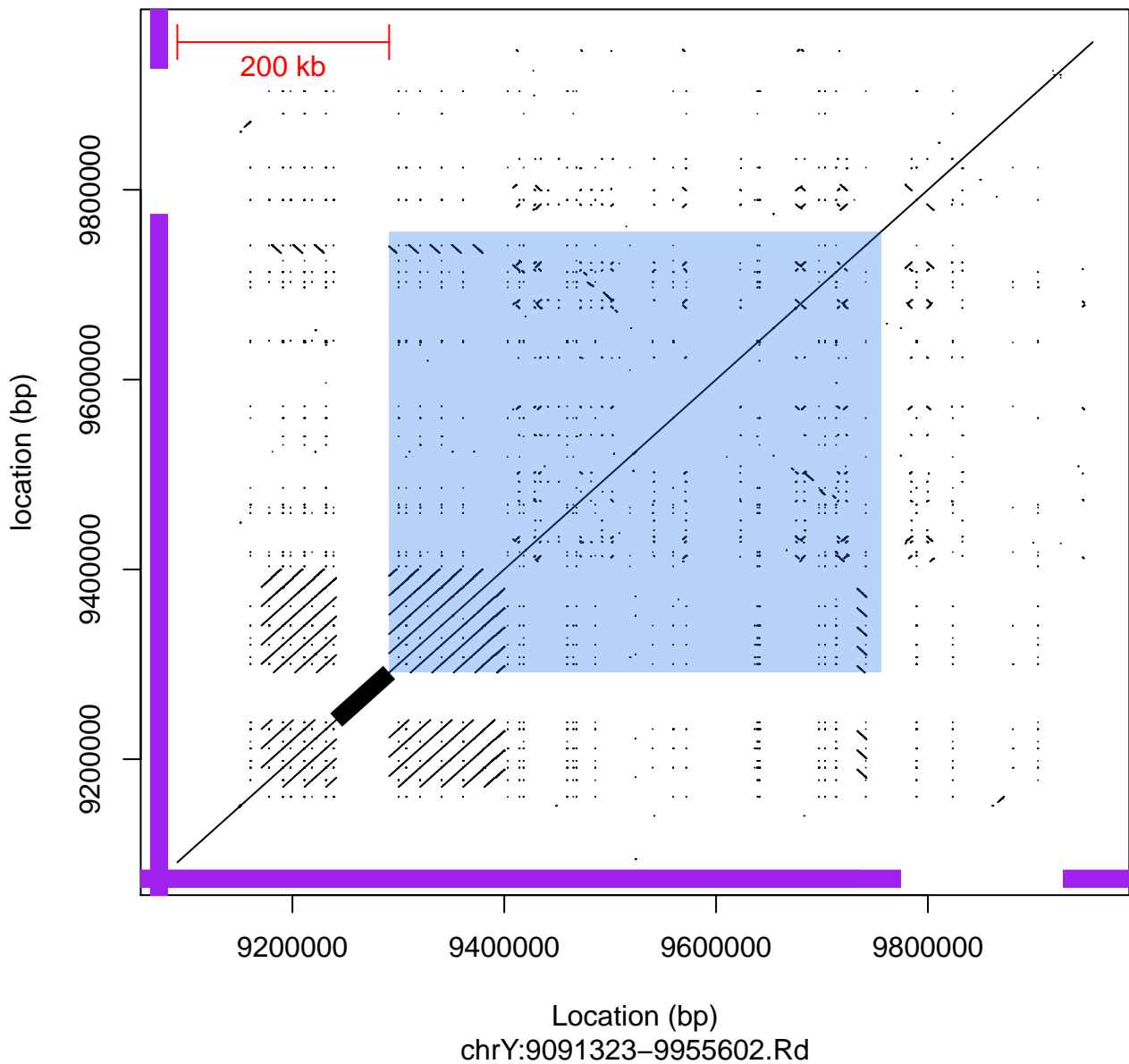
Dotplot of mBM.Y.1 on chrY



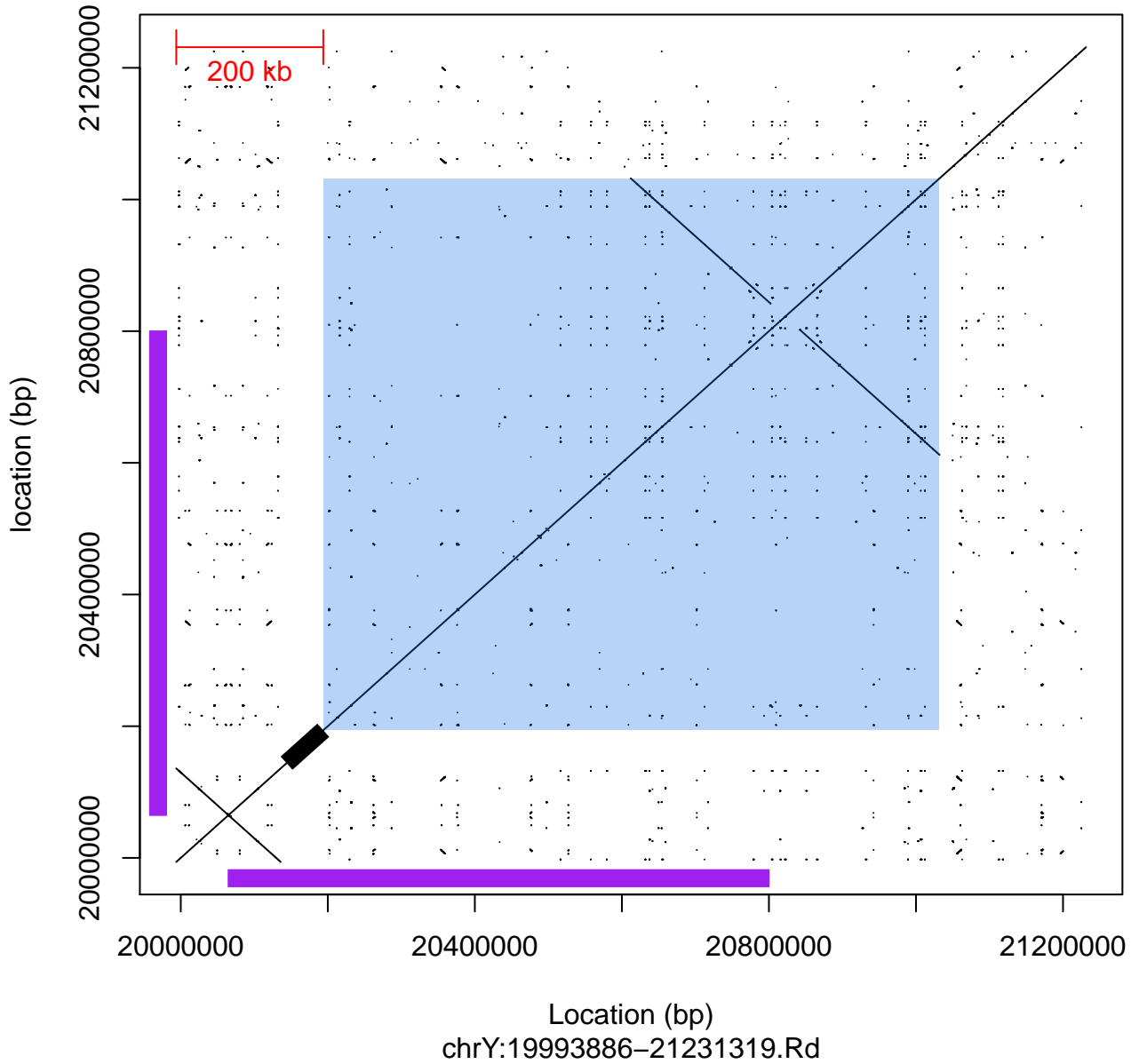
Dotplot of mBM.Y.2 on chrY



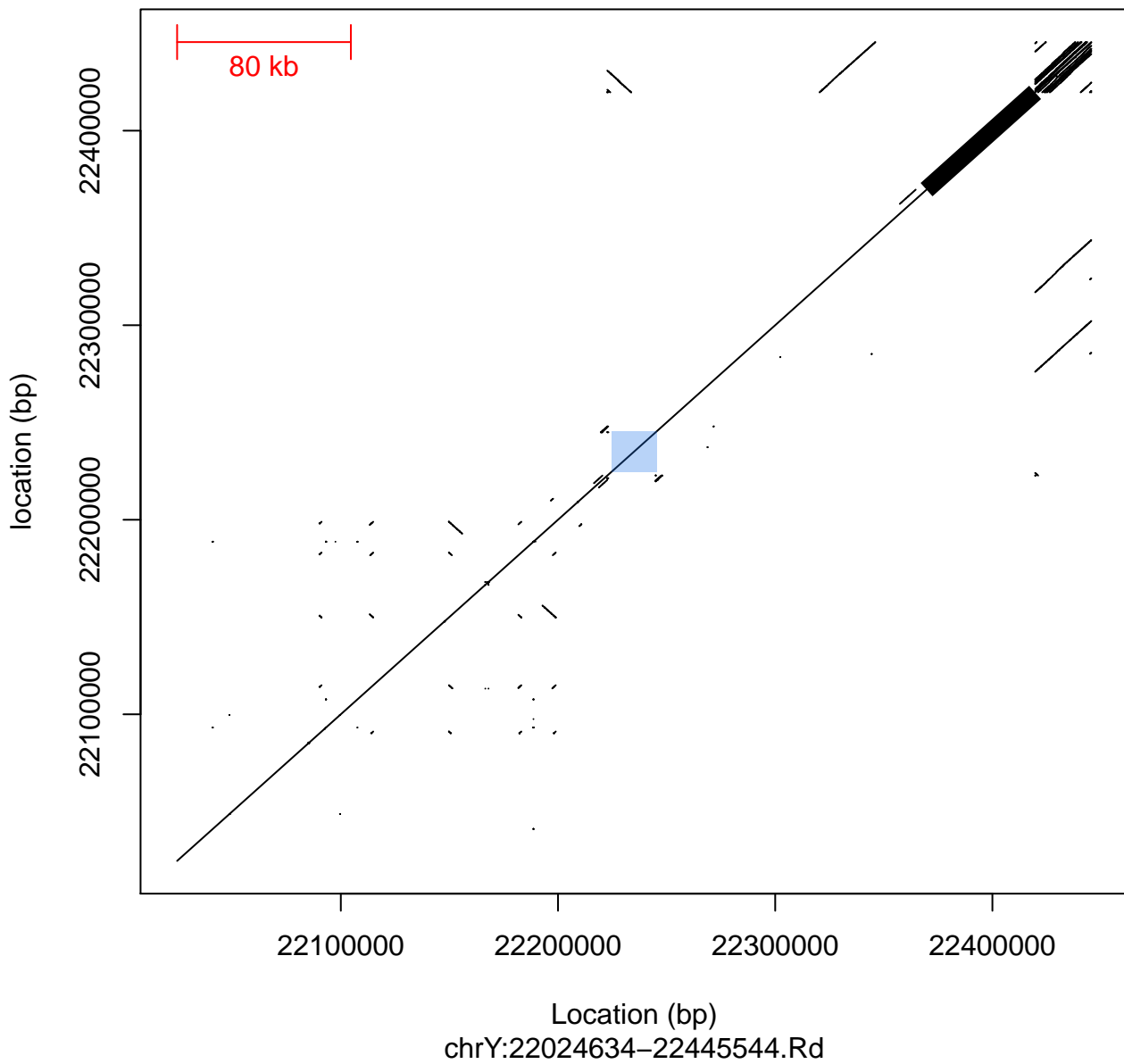
Dotplot of mBM.Y.3 on chrY



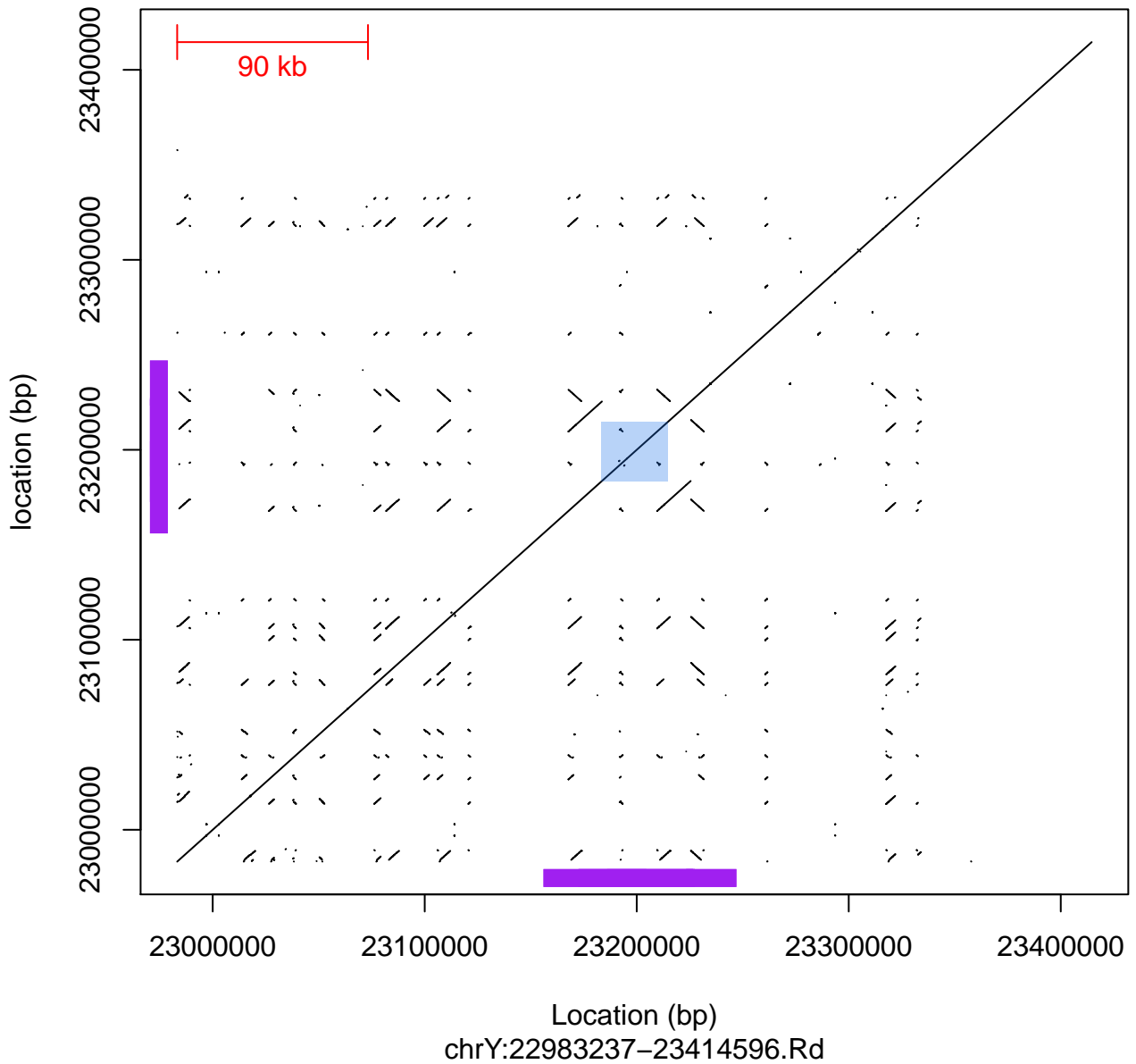
Dotplot of mBM.Y.4 on chrY



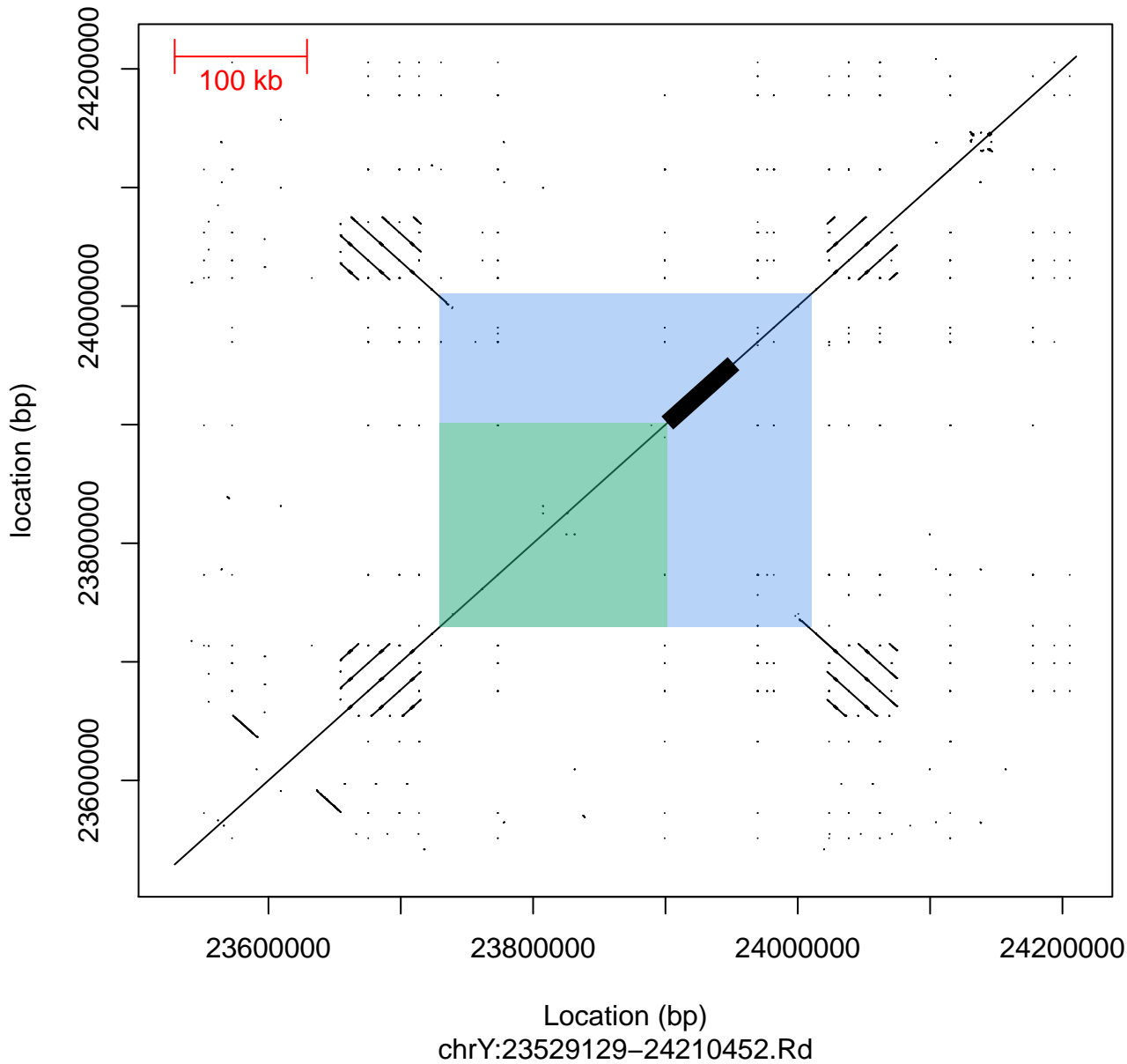
Dotplot of mBM.Y.5 on chrY



Dotplot of mBM.Y.6 on chrY



Dotplot of mBM.Y.7, ROIno.Y.16 on chrY



Dotplot of mBM.Y.8, ROIno.Y.19 on chrY

