***New Phytologist* Supporting Information File 4**

Article title**: Diverse mechanisms of resistance to *Pseudomonas syringae* in a thousand natural accessions of *Arabidopsis thaliana***

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The following Supporting Information is available for this article:

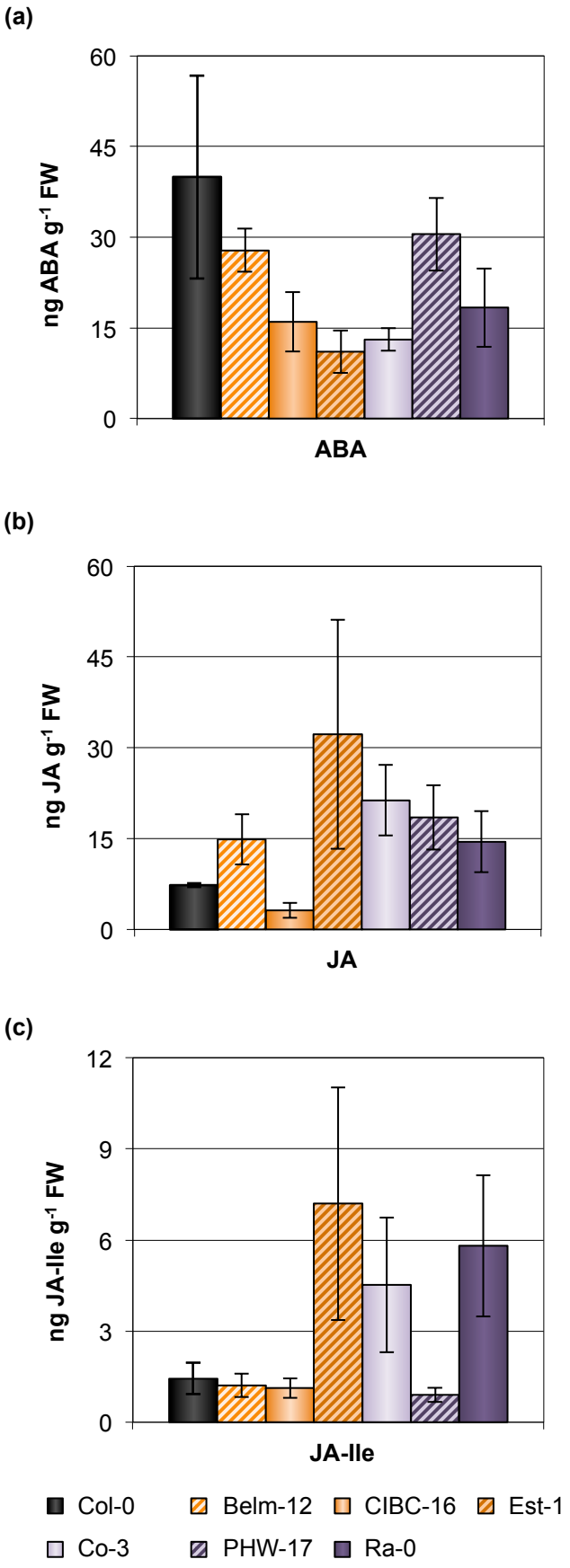
Fig. S7. Basal accumulation of abscisic acid (ABA), jasmonic acid (JA), and jasmonoyl isoleucine (JA-Ile) are unchanged between *Pseudomonas syringae* pv. *tomato* (*Pst*) DC3000-resistant accessions and susceptible Arabidopsis Col-0.

Fig. S8. Several *Pseudomonas syringae* pv. *tomato* (*Pst*) DC3000-resistant accessions are also resistant to *Pseudomonas cannabina* pv. *alisalensis* (*Pcal*) ES4326R.

Fig. S9. Genotyping of Arabidopsis F_1 plants of the crosses between accessions resistant to *Pseudomonas syringae* pv. *tomato* DC3000 and the susceptible accession Col-0.

Fig. S10. Disease symptoms in individuals of the CIBC-16 ♀ x Col-0 ♂ Arabidopsis F_2 population and the parents from which the population was derived.

Fig. S11. SHOREmap analysis of *Pseudomonas syringae* pv. *tomato* DC3000-resistant and -susceptible F_2 bulks.



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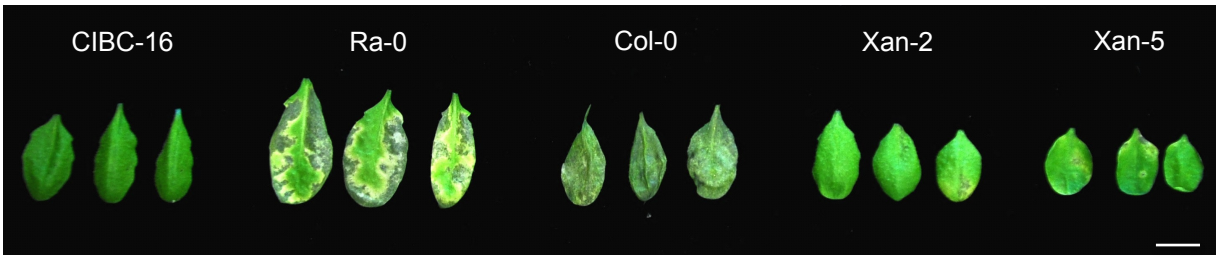
(a) ABA, (b) JA, and (c) JA-Ile concentration in five-week-old leaves of Col-0 and *Pst* DC3000-resistant accessions. Error bars represent the standard error of the mean from six plants. Observed variability was high as hormones quantified were close to the limit of detection. ANOVA was not significant ($P < 0.05$) for any of the hormones tested. Abbreviation: FW = fresh weight.

(a)



(b)

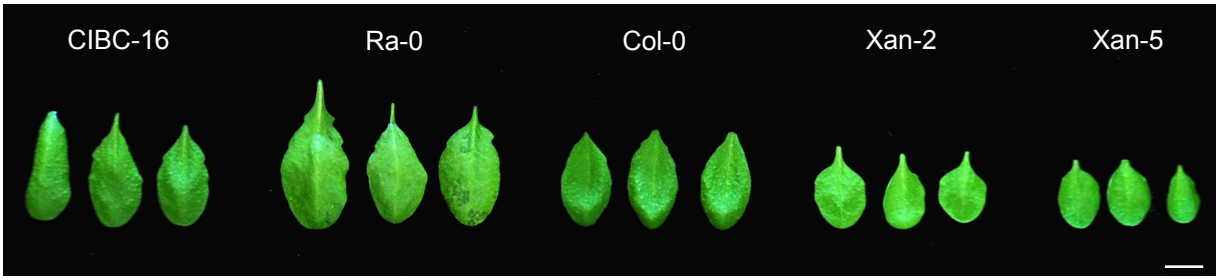


Fig. S8. Several *Pseudomonas syringae* pv. *tomato* (*Pst*) DC3000-resistant accessions are also resistant to *Pseudomonas cannabina* pv. *alisalensis* (*Pcal*) ES4326R.

(a) Disease symptoms in *Arabidopsis thaliana* accessions 4 days after syringe-infiltration with *Pcal* ES4326R at an inoculum of 5 x 10^6 CFU ml^{-1}. White bar length is equal to 1 cm. Not as evident on the image but by day 4, Col-0 leaves had collapsed from disease-associated cell death.

(b) No symptoms were observed in *A. thaliana* accessions 4 days after syringe-infiltration with non-pathogenic *Pst* Δ*hrcC* at an inoculum of 2 x 10^6 CFU ml^{-1}. Image was composed from accessions' individual images from a single experiment. White bar length is equal to 1 cm.

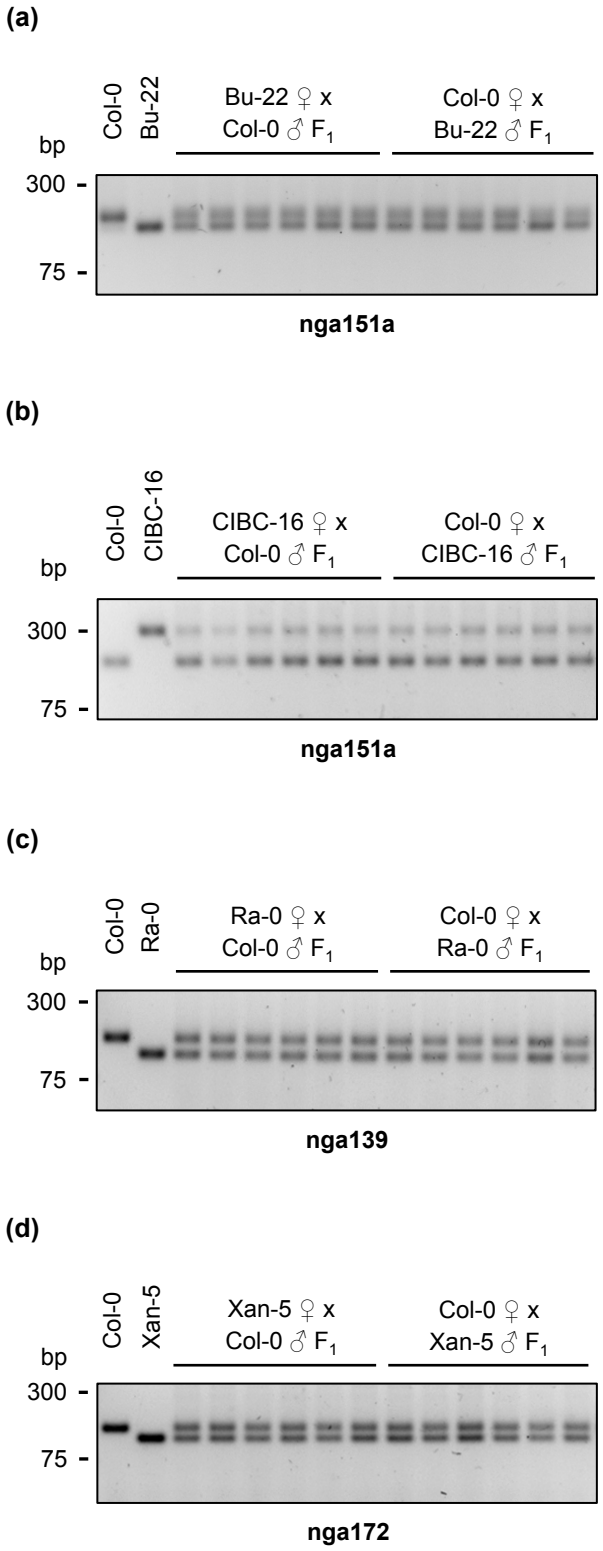


Fig. S9. Genotyping of Arabidopsis F_1 plants of the crosses between accessions resistant to *Pseudomonas syringae* pv. *tomato* DC3000 and the susceptible accession Col-0.

(a) Amplification of microsatellite locus nga151a on the F_1 parents Col-0 and Bu-22, and in 6 plants of the F_1 cross between those two accessions and 6 plants of the reciprocal cross.

(b) Amplification of microsatellite locus nga151a on the F_1 parents Col-0 and CIBC-16, and in 6 plants of the F_1 cross between those two accessions and 6 plants of the reciprocal cross.

(c) Amplification of microsatellite locus nga139 on the F_1 parents Col-0 and Ra-0, and in 6 plants of the F_1 cross between those two accessions and 6 plants of the reciprocal cross.

(d) Amplification of microsatellite locus nga172 on the F_1 parents Col-0 and Xan-5, and in 6 plants of the F_1 cross between those two accessions and 6 plants of the reciprocal cross.

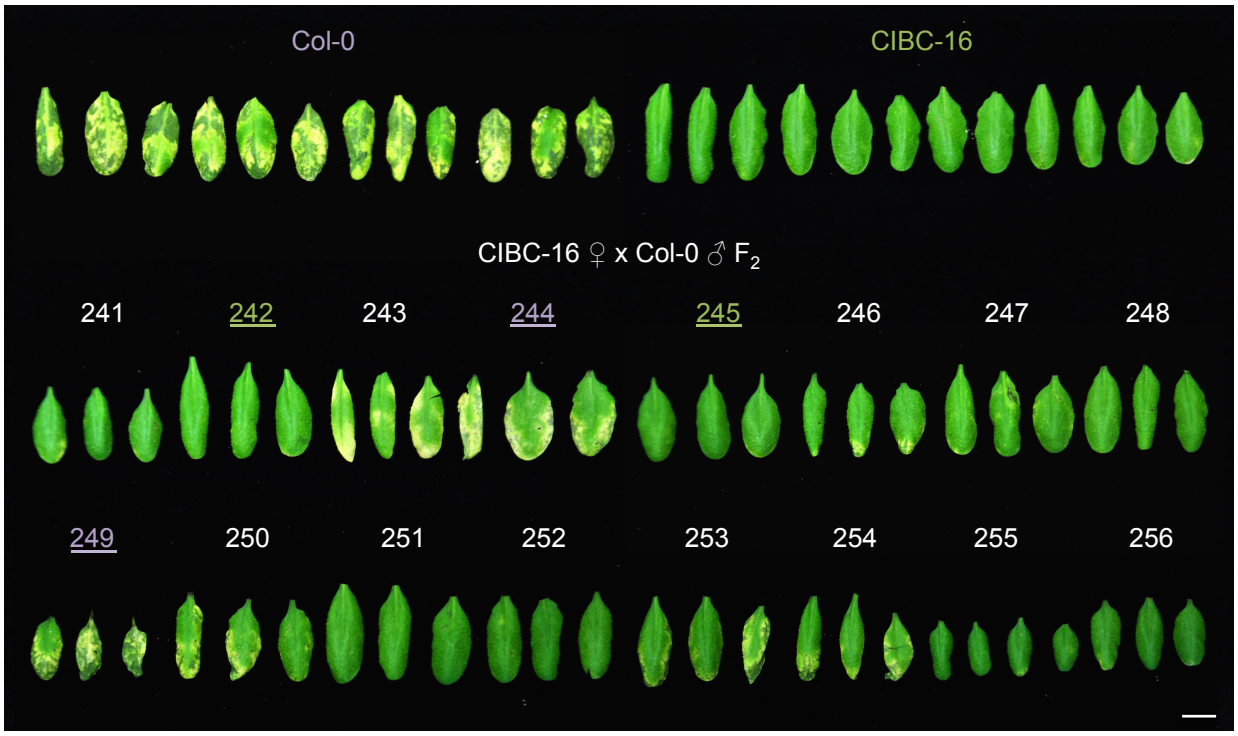


Fig. S10. Disease symptoms in individuals of the CIBC-16 ♀ x Col-0 ♂ Arabidopsis F_2 population and the parents from which the population was derived.

Pictures were taken 4 days after syringe-infiltration with 2 x 10^6 CFU ml^{-1} *Pseudomonas syringae* pv. *tomato* (*Pst*) DC3000. Numbers indicate the individual plant of the F_2 population evaluated. Except for F_2 plant 255, 3 leaves are shown for every individual F_2 plant. Underlined and highlighted in green are those F_2 individuals deemed as resistant to *Pst* DC3000, while underlined and highlighted in purple are those considered susceptible. F_2 plants with *in planta Pst* DC3000 bacterial numbers below the highest data point of the resistant parent (CIBC-16) were considered resistant, while F_2 plants with bacterial numbers above the lowest data point of the susceptible parent (Col-0) were considered susceptible. White bar length is equal to 1 cm. Image was composed from individual images from a single experiment.

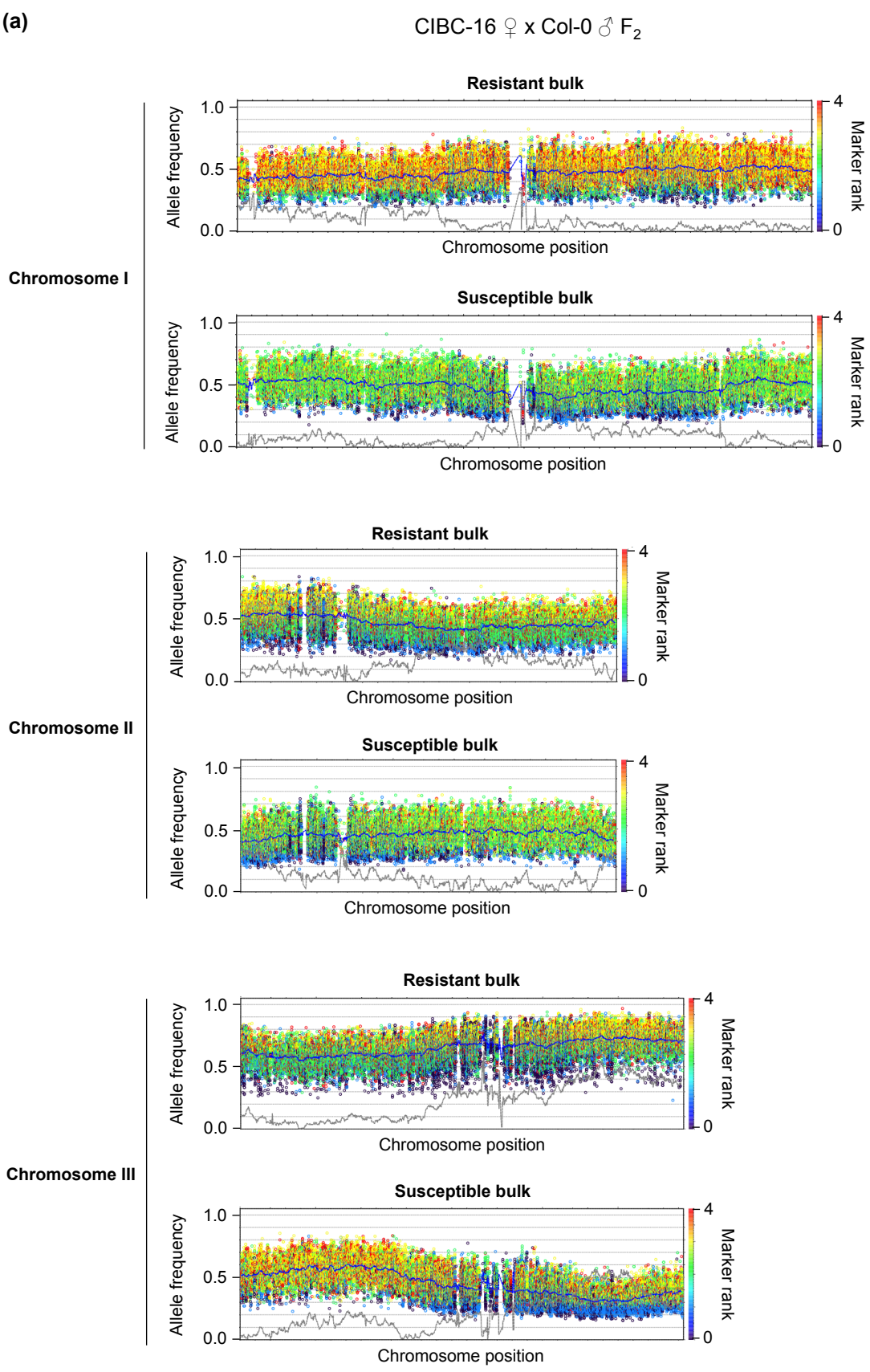
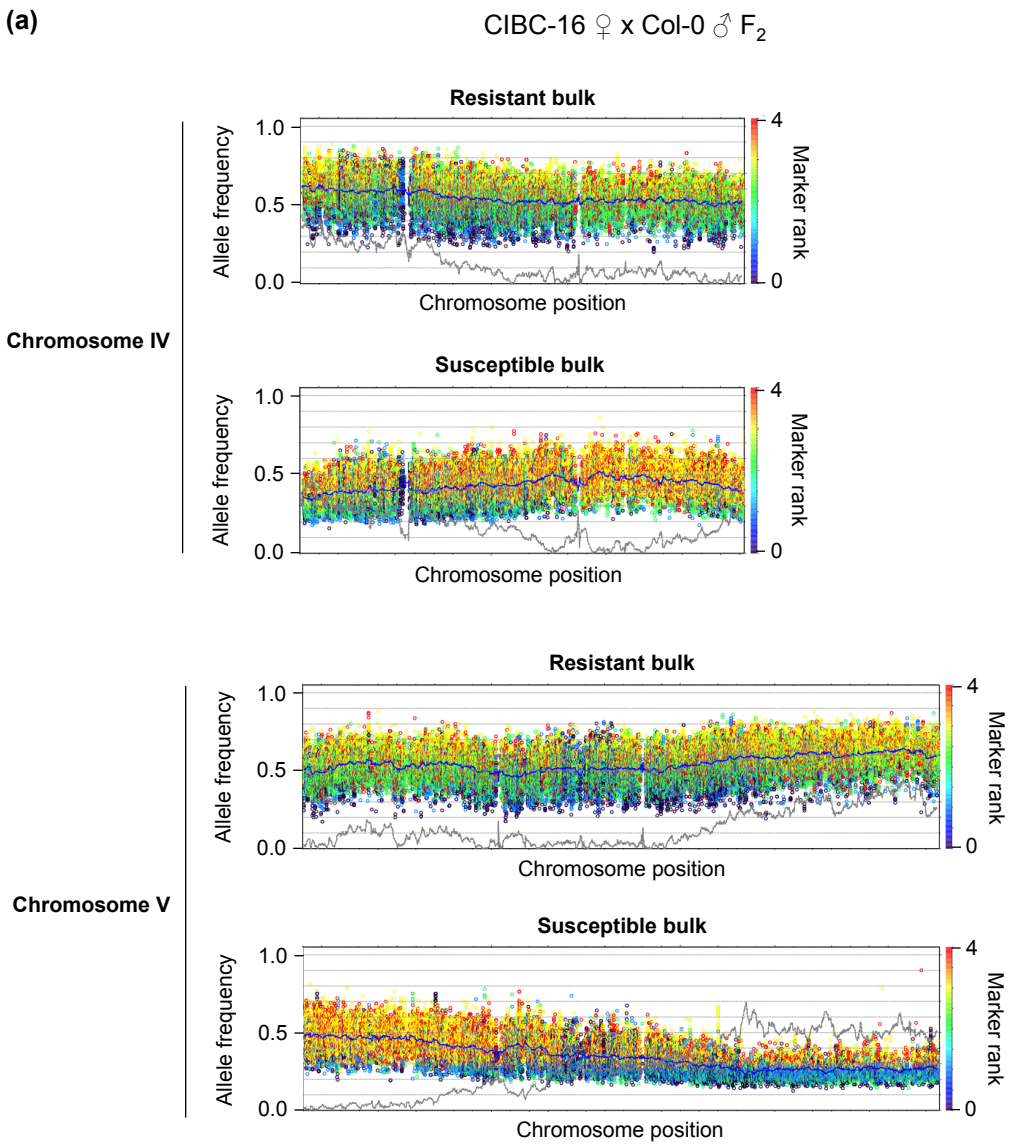


Fig. S11. SHOREmap analysis of *Pseudomonas syringae* pv. *tomato* DC3000-resistant and -susceptible F_2 bulks.

(a) SHOREmap analysis of Arabidopsis F_2 bulks derived from the CIBC-16 ♀ x Col-0 ♂ cross. Fifty-one resistant and 27 susceptible plants were used for each bulk. Each colored circle represents the allele frequency for a marker, the blue line represents window-based allele frequencies, while the gray line shows the window-based boost value. Higher marker rank values correspond to better quality markers. If there had been a single locus associated with resistance, the resistant bulk allele frequency at that locus would have been close to 1, and that for the susceptible bulk close to 0 (assuming only homozygous genotypes were present in the bulks); while a high value for the window-based boost would have been observed for that chromosomal region.



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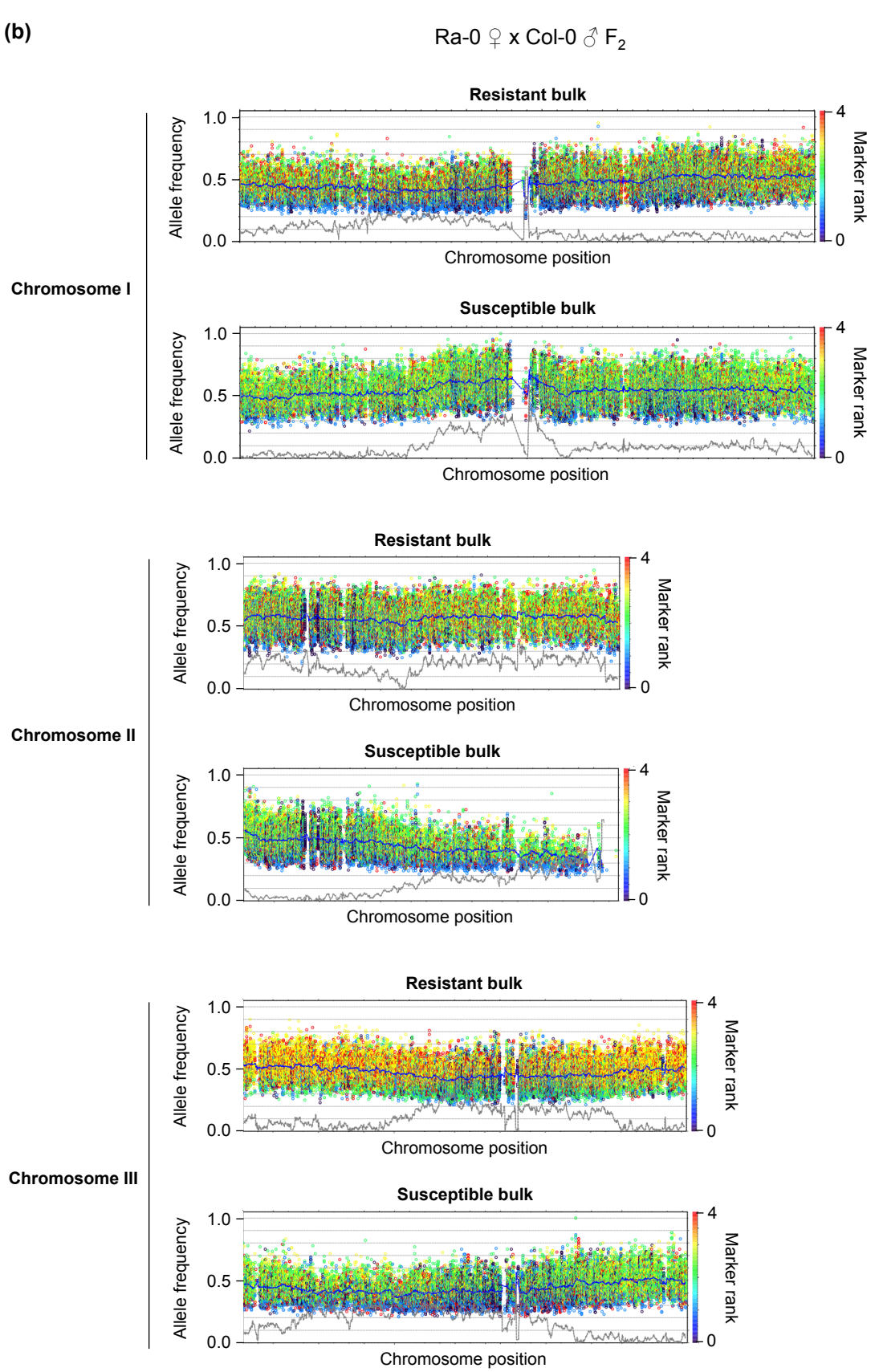

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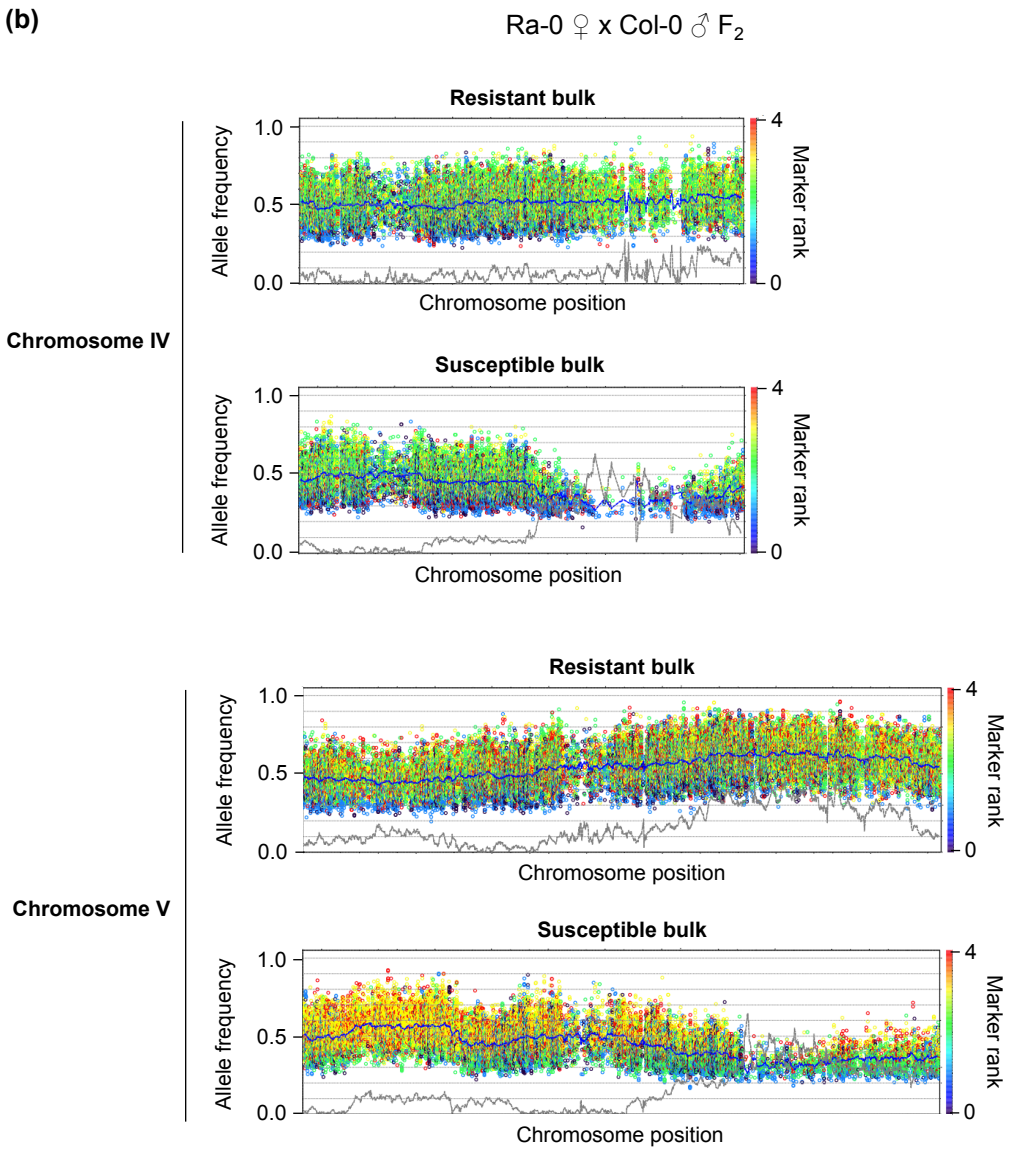
(b) SHOREmap analysis of Arabidopsis F_2 bulks derived from the Ra-0 ♀ x Col-0 ♂ cross. Seventy-two resistant and 13 susceptible plants were used for each bulk. Each colored circle represents the allele frequency for a marker, the blue line represents window-based allele frequencies, while the gray line shows the window-based boost value. Higher marker rank values correspond to better quality markers. If there had been a single locus associated with resistance, the resistant bulk allele frequency at that locus would have been close to 1, and that for the susceptible bulk close to 0 (assuming only homozygous genotypes were present in the bulks); while a high value for the window-based boost would have been observed for that chromosomal region.



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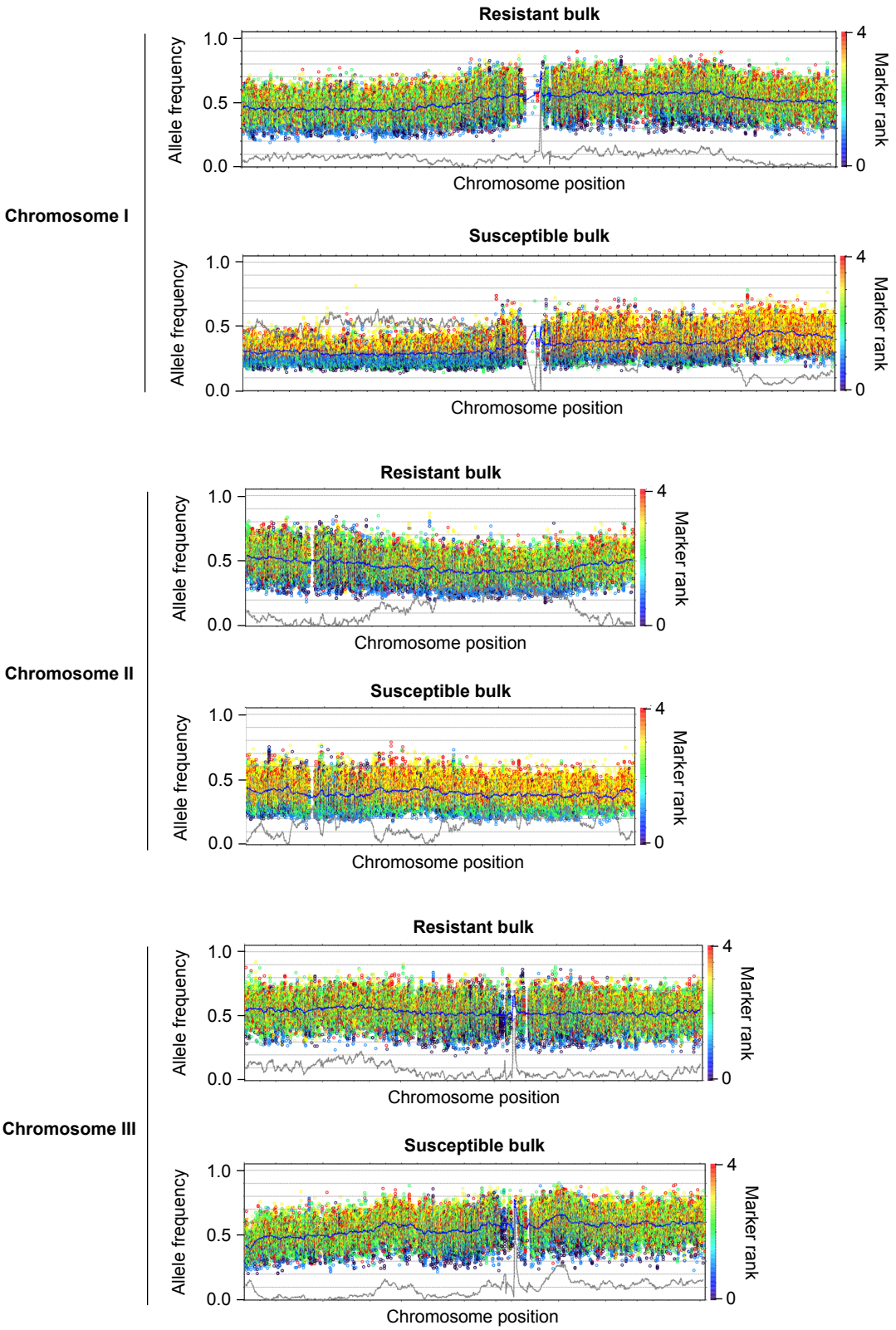

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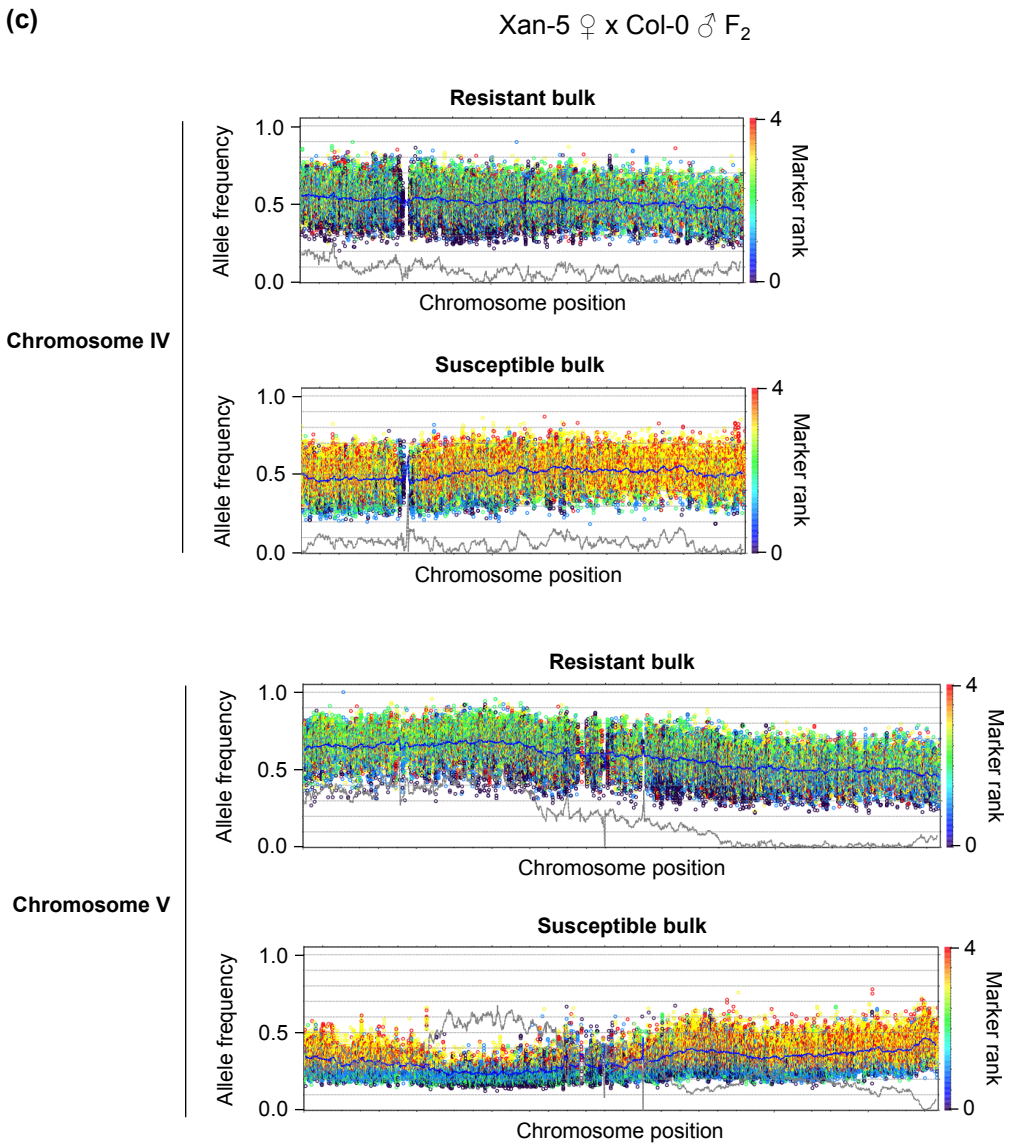
(c) SHOREmap analysis of Arabidopsis F_2 bulks derived from the Xan-5 ♀ x Col-0 ♂ cross. Eighty-three resistant and 27 susceptible plants were used for each bulk. Each colored circle represents the allele frequency for a marker, the blue line represents window-based allele frequencies, while the gray line shows the window-based boost value. Higher marker rank values correspond to better quality markers. If there had been a single locus associated with resistance, the resistant bulk allele frequency at that locus would have been close to 1, and that for the susceptible bulk close to 0 (assuming only homozygous genotypes were present in the bulks); while a high value for the window-based boost would have been observed for that chromosomal region.



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