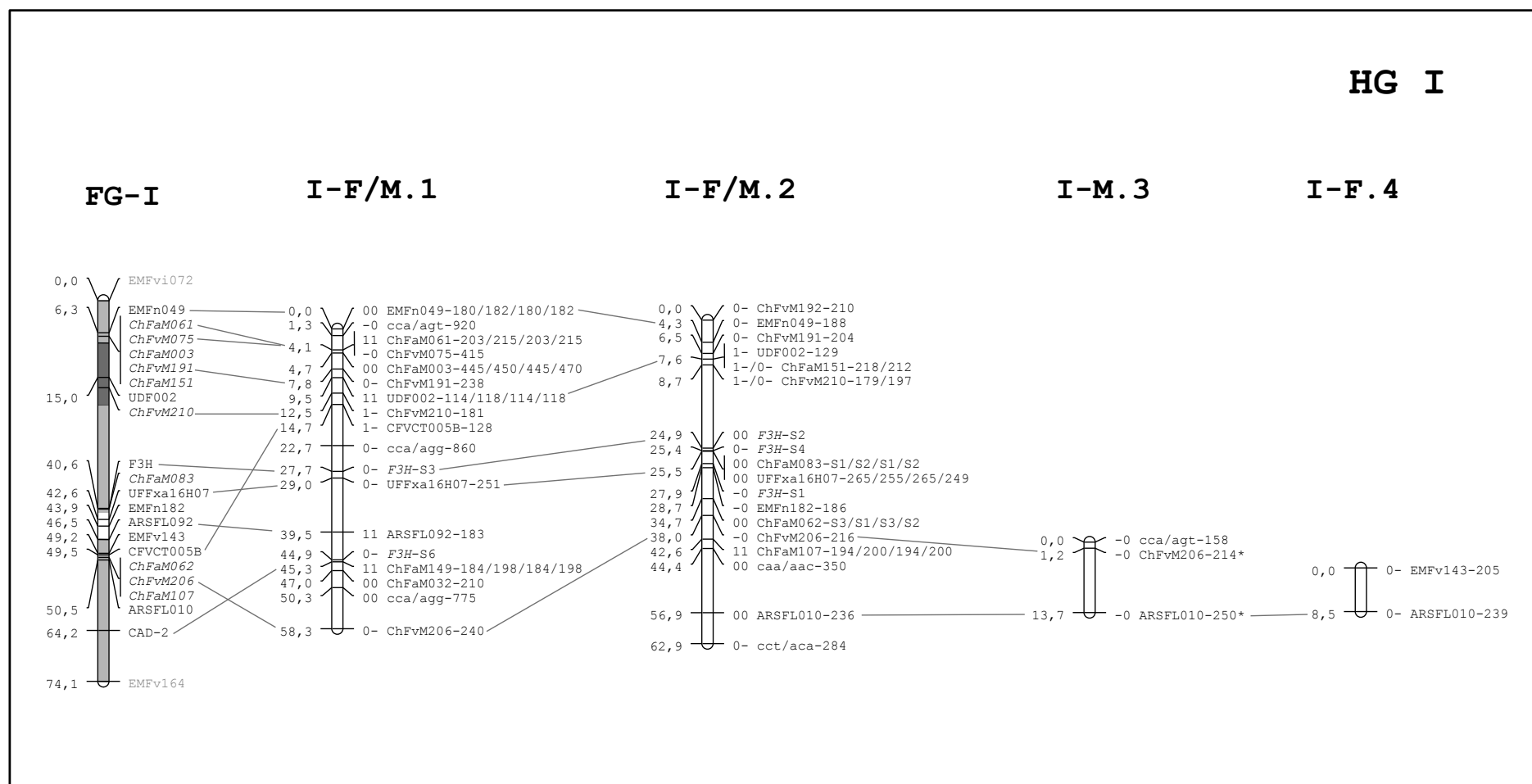


**Figure S1.** Integrated linkage map of the cultivated strawberry based on a F<sub>1</sub> progeny derived from the cross between '232' and '1392' showing the map positions (in cM) of the new genes and markers used in this investigation. The six strawberry candidate genes involved in aroma biosynthesis are shown underlined and the two single Mendelian traits,  $\gamma$ -decalactone (HGIII) and mesifurane (HGVII) are shown in bold. Segregation distortion is indicated by means of significance level *P* of the  $\chi^2$  test: \* *P* ≤ 0.05, \*\* *P* ≤ 0.01, \*\*\* *P* ≤ 0.001. The diploid *Fragaria* reference map (adapted from Sargent *et al.*, 2008) is presented on the left with the bin map position of candidate genes and anchor markers.





# HG III

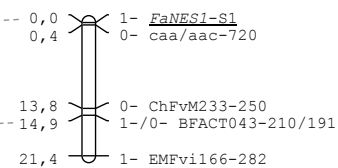
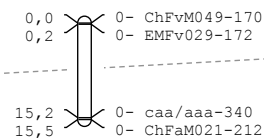
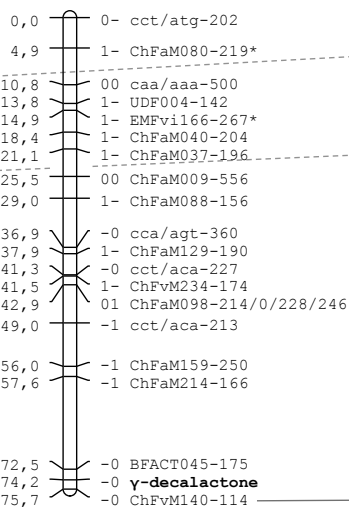
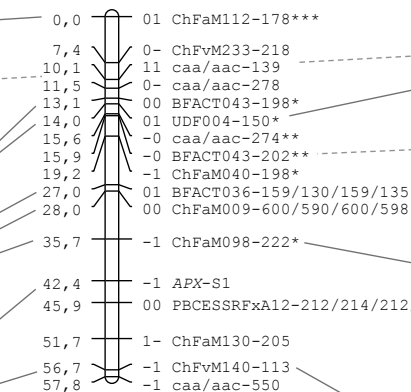
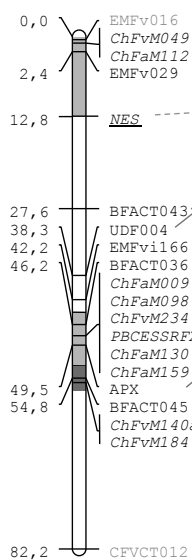
## FG-III

## III-F/M.1

## III-F/M.2

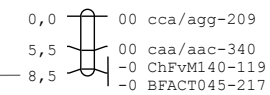
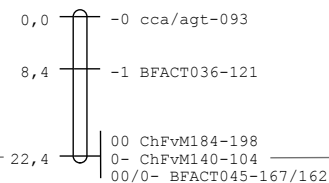
## III-F.3

## III-F.4



## III-F/M.5

## III-F/M.7



## III-F/M.6

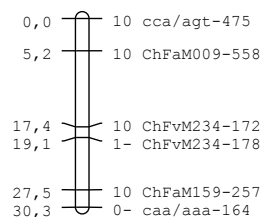


Figure S1. Continued.

# HG IV

## FG-IV

## IV-F/M.1

## IV-F/M.2

## IV-F.3

## IV-F/M.4

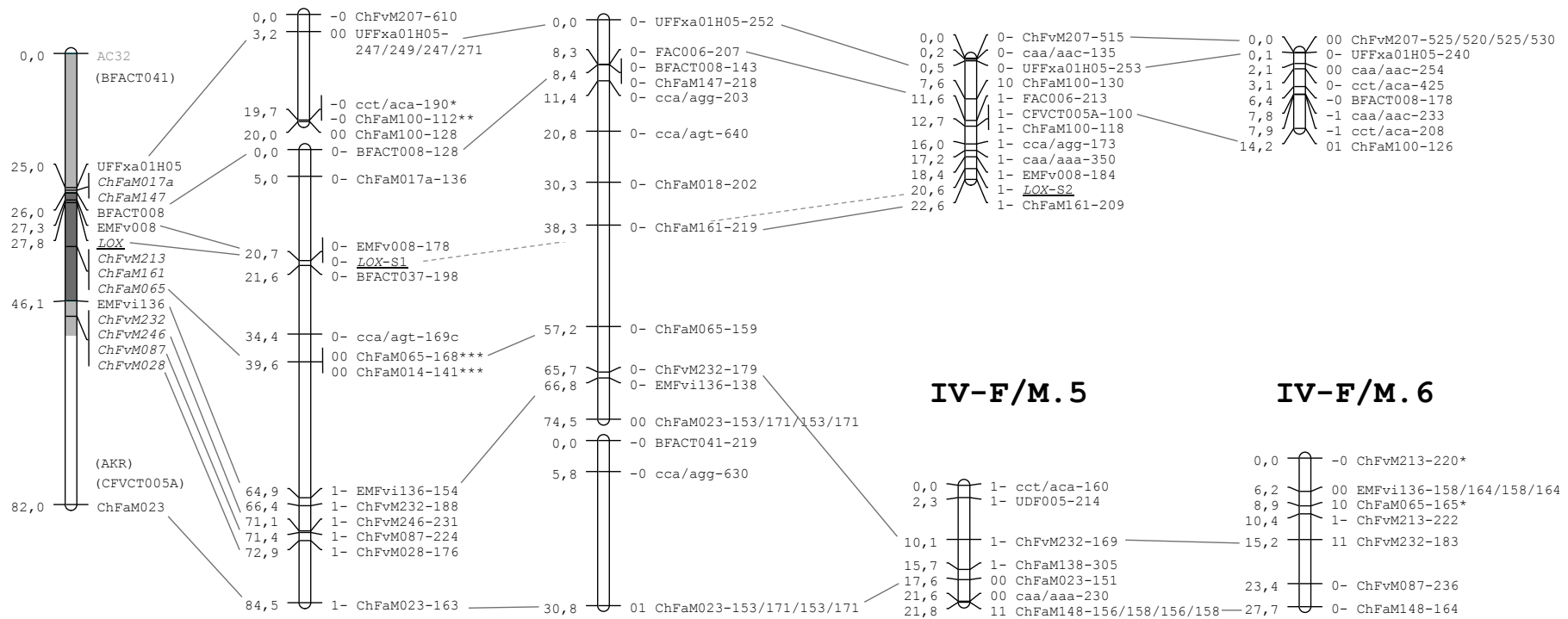


Figure S1. Continued.

# HG V

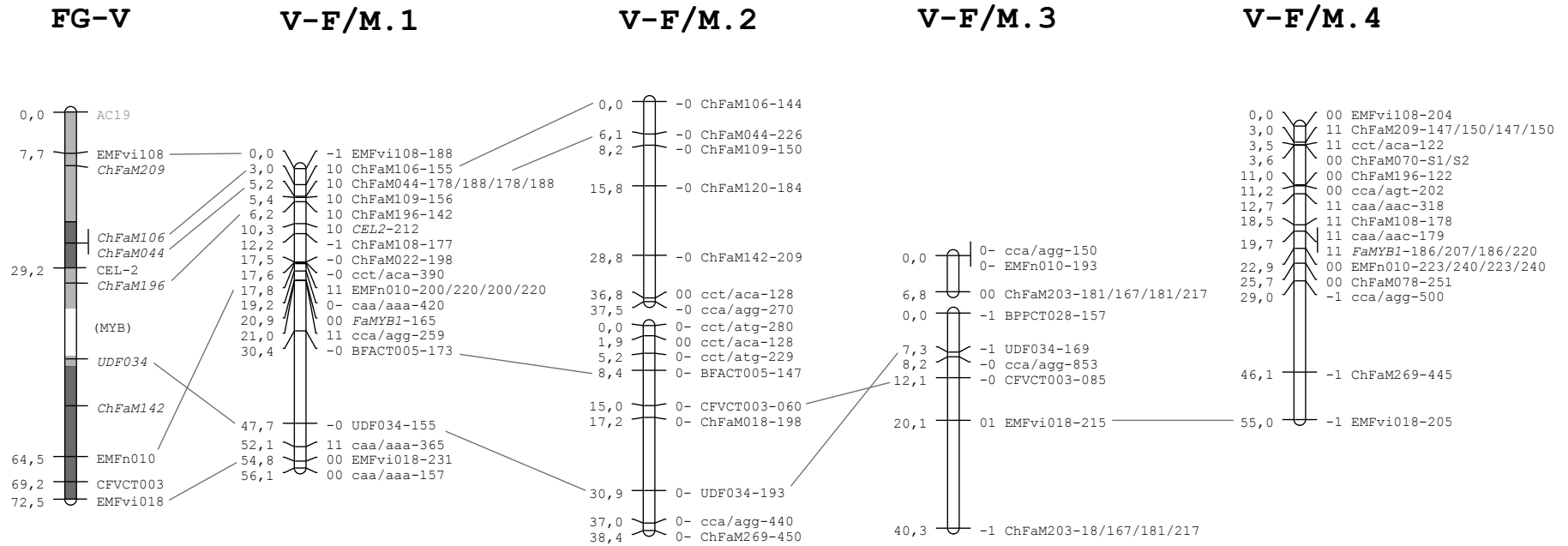


Figure S1. Continued.

# HG VI

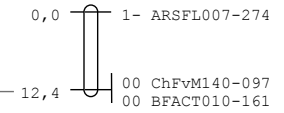
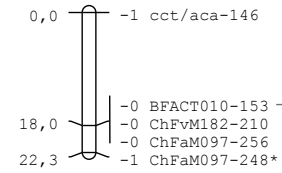
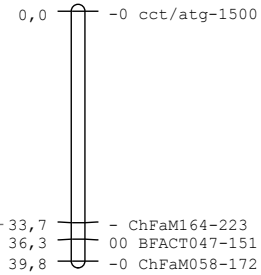
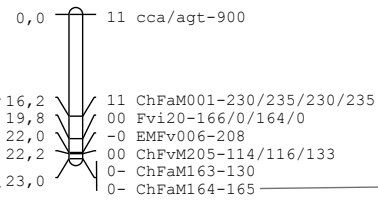
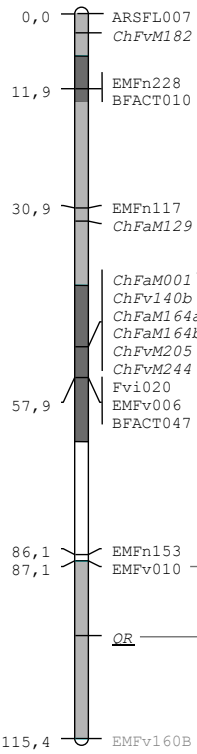
## FG-VI

## VI-F/M.1

## VI-M.5

## VI-M.3

## VI-F/M.4



## VI-M.2

## VI-F/M.7

## VI-F.6

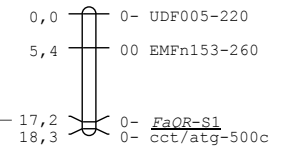
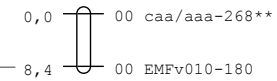
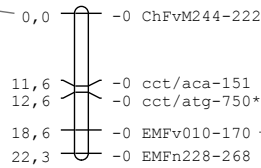


Figure S1. Continued.

# HG VII

## FGVII

## VII-F/M.1

## VII-F/M.2

## VII-F/M.3

## VII-F.4

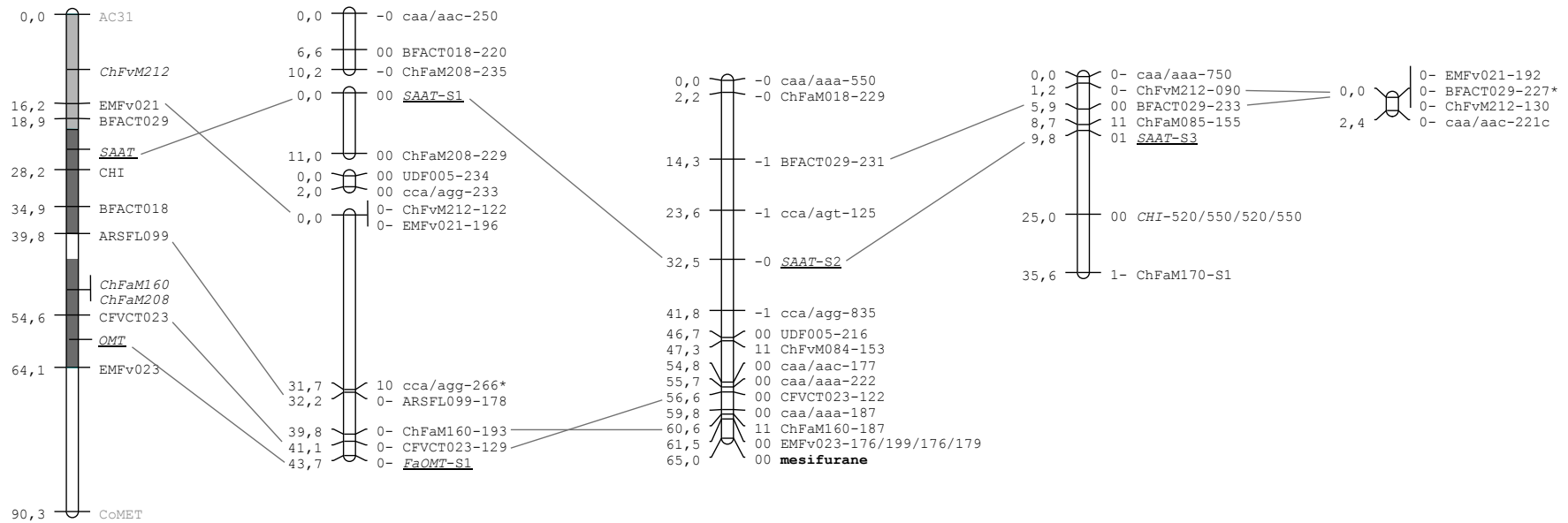
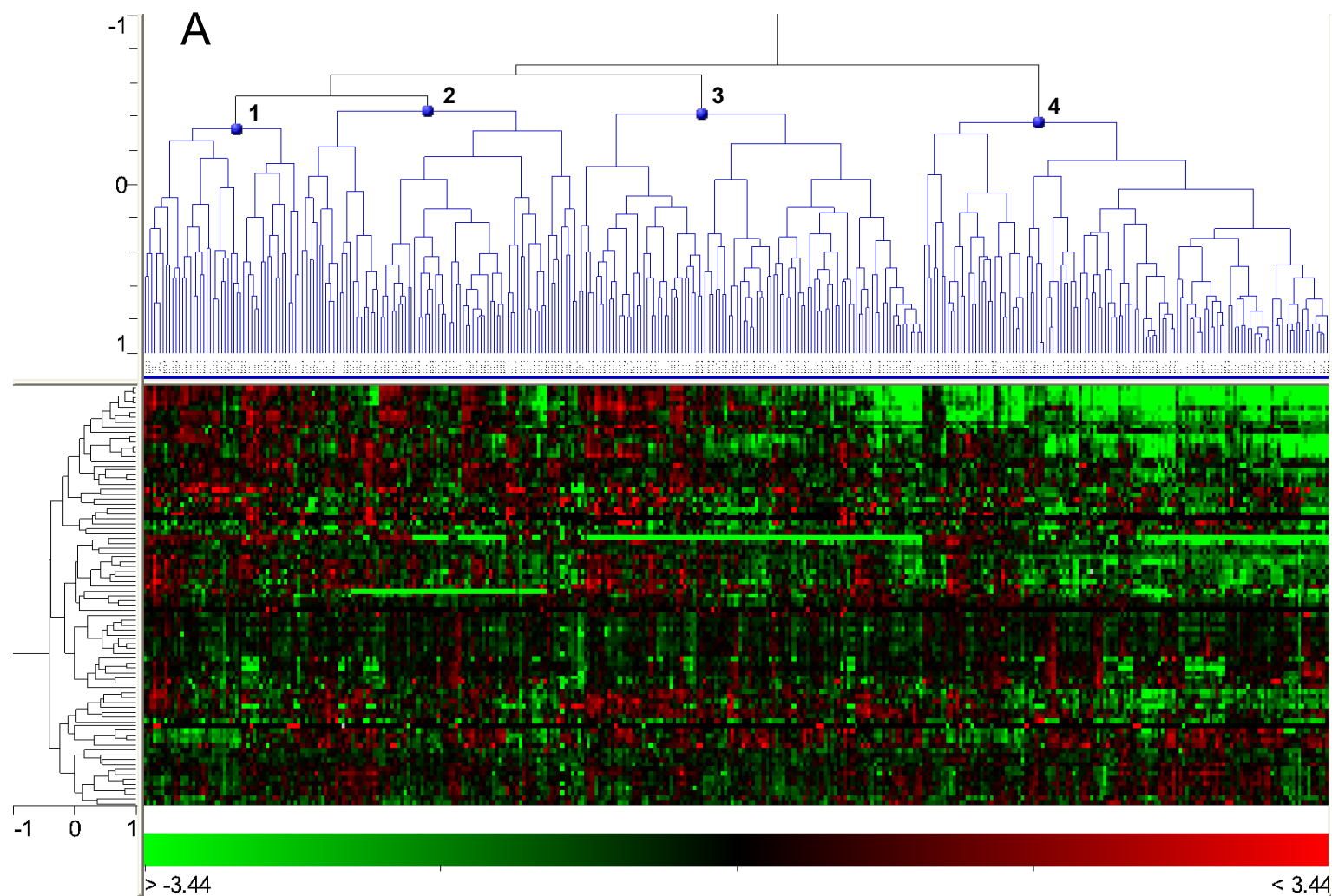
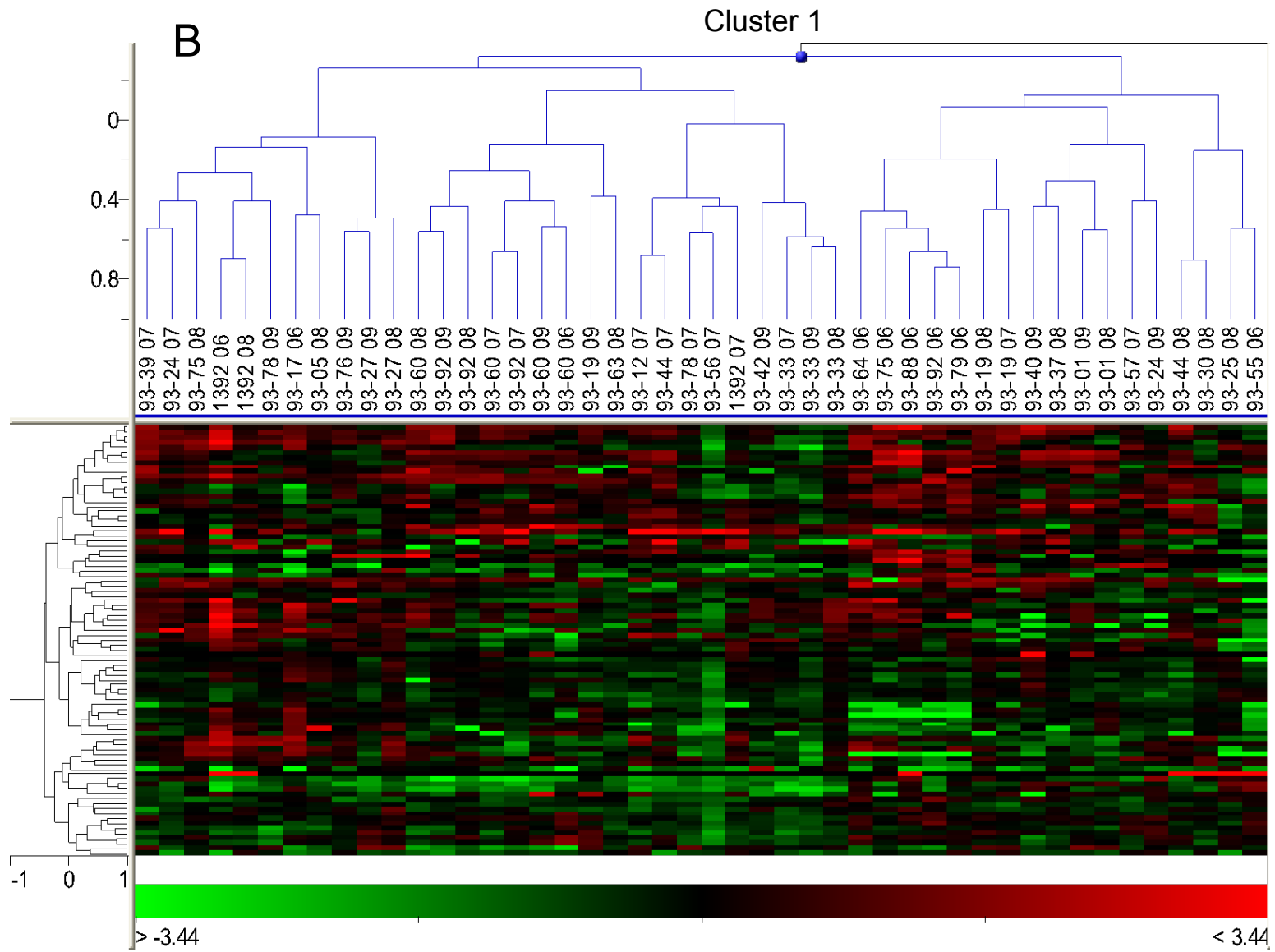


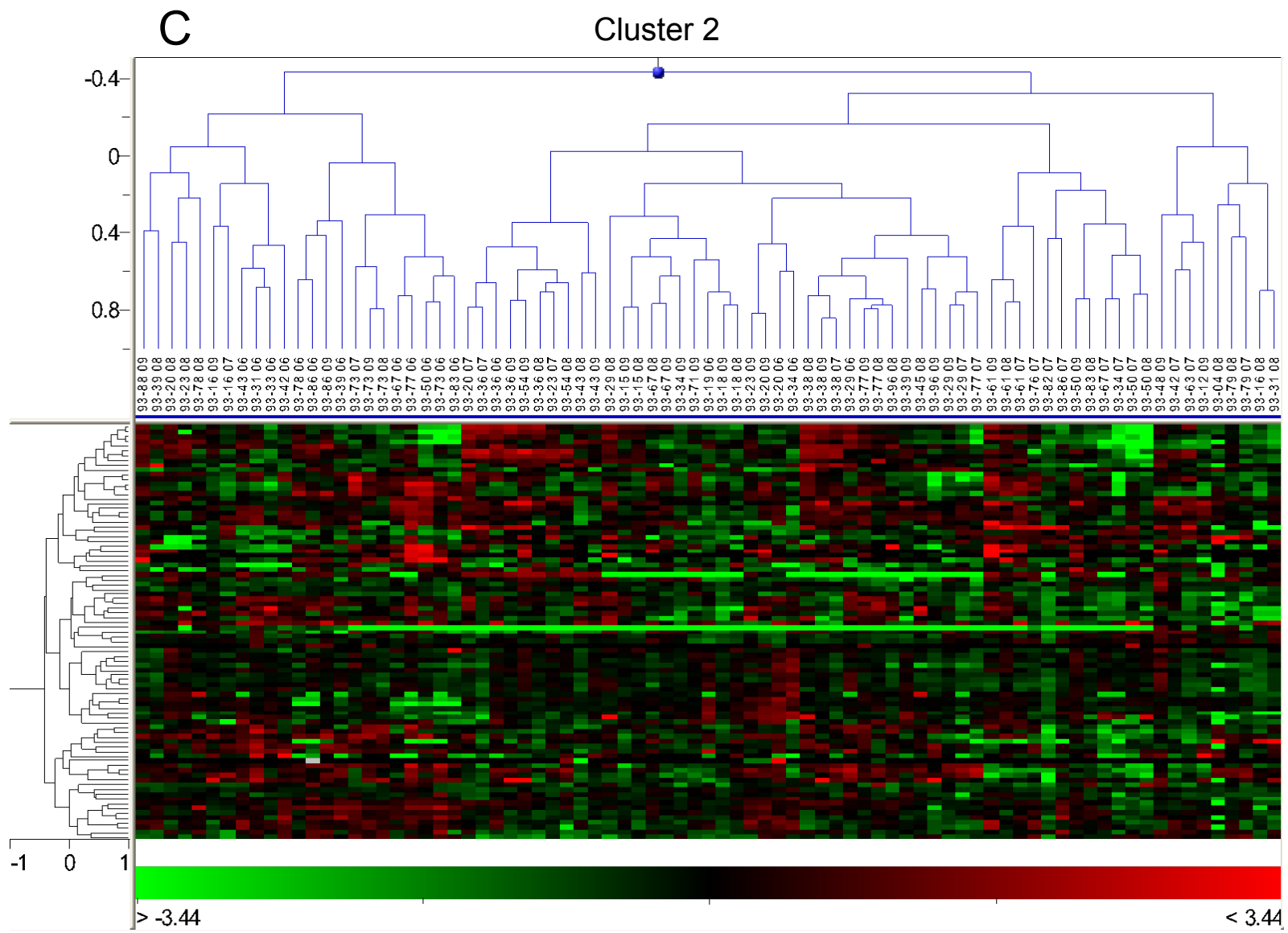
Figure S1. Continued.

**Figure S2.** A, HCA and heat map representation of volatile profiles of each individual in the population during the 4 assessed years. B, Detail of cluster 1. C, Detail of cluster 2. D, Detail of cluster 3. E, Detail of cluster 4.





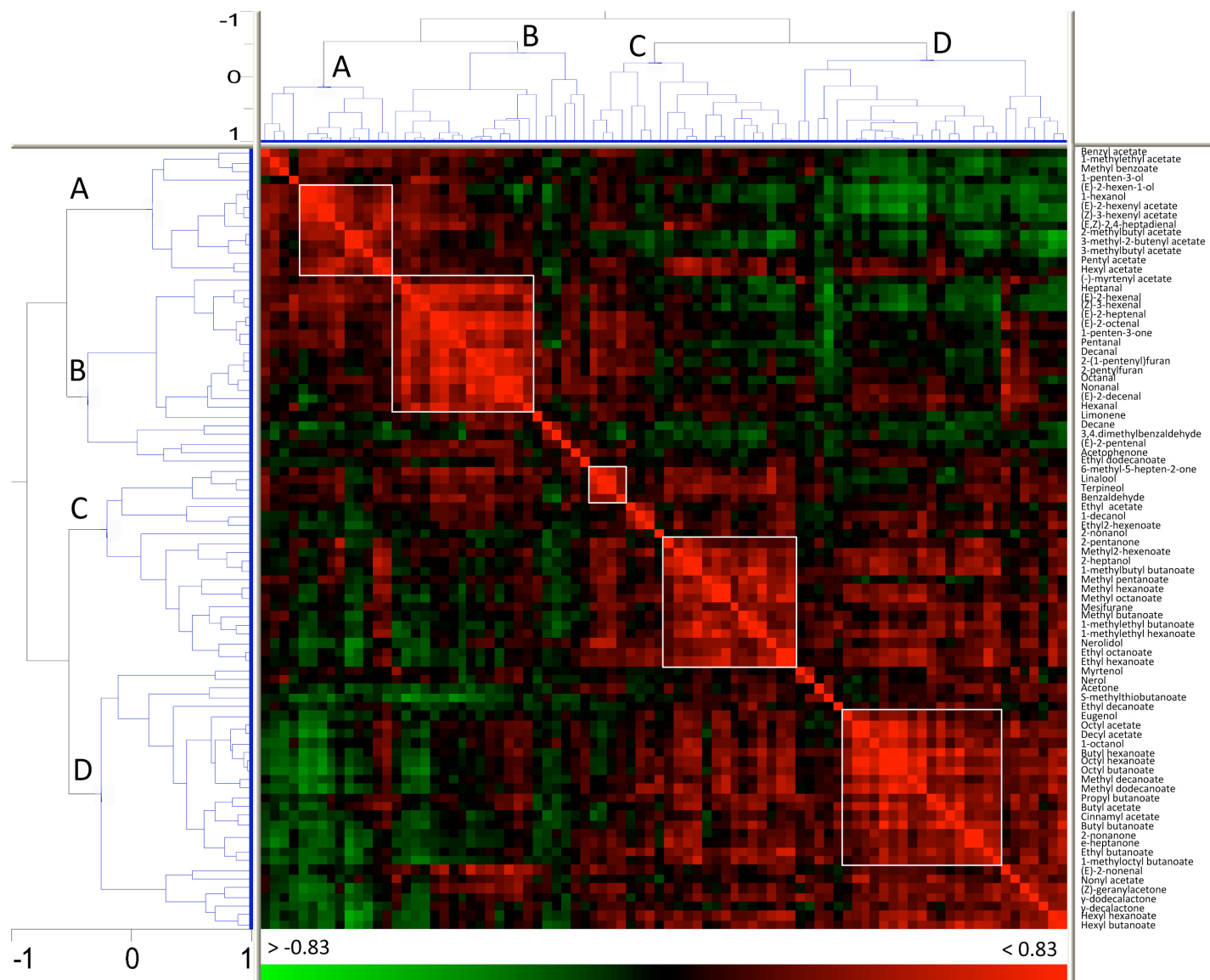




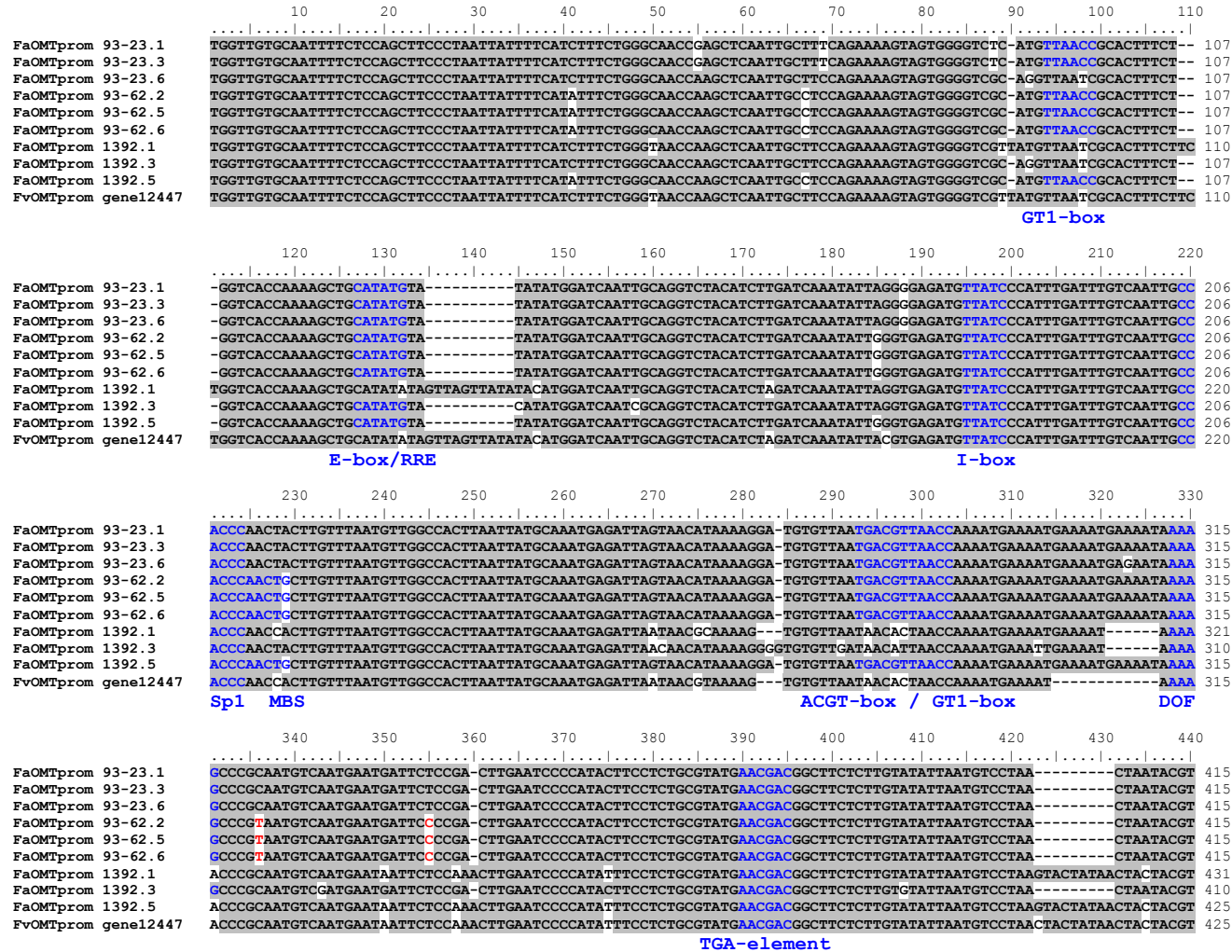




**Figure S3.** HCA and heat map representation of pair-wise correlations between aroma volatiles identified in '232' × '1392' for year 2008. Regions shown in green and red indicate negative and positive correlations, respectively. Clusters are indicated by different letters and sub-clusters of highly correlated compounds are arranged in white rectangles.



**Figure S4.** Sequence alignment of promoter sequences of *OMT*. *FvOMT* promoter sequence was obtained from *F. vesca* acc. Hawaii 4 (www. Strawberrygenome.org). *FaOMT* promoter sequences from progeny lines 93-23 and 93-62 were obtained from 3 different clones (1, 3 and 6 or 2, 5 and 6, respectively) obtained from bands 4a and b on gel in Fig. 4B (indicated with arrows). *FaOMT* promoter sequences from parental line '1392' were obtained from 3 different clones (1, 3 and 5) obtained after purification of the most similar band to that of *F. vesca* on gel in Fig. 4 (band 2). Common promoter motifs are shown in blue. Motifs and SNPs specific of active allele are highlighted in red. Position of primers for *FaOMT* marker are highlighted in yellow.



450 460 470 480 490 500 510 520 530 540 550

FaOMTprom 93-23.1 ACCTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 515

FaOMTprom 93-23.3 ACNCTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 515

FaOMTprom 93-23.6 ACTCTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 515

FaOMTprom 93-62.2 ACTCTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 515

FaOMTprom 93-62.5 ACTCTANGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 515

FaOMTprom 93-62.6 ACTCTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 515

FaOMTprom 1392.1 ACTTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAGAACTAAATTC 532

FaOMTprom 1392.3 ACTCTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAG-AACGTAATTC 510

FaOMTprom 1392.5 ACTTATGTCAAATATCAAAGAGATTGTA-----TCATCTTATTCTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAGAACTAAATTC 526

FvOMTprom gene12447 ACTTATGTCAAATATCAAAGAGATTGTAATCATCTTATTCTCTTCCCTTGATACATAGGAATGCACATTTTCAACAACCTGACGAGAACTAAATTC 535

DOF E-box/RRE MBS ACGT-box

560 570 580 590 600 610 620 630 640 650 660

FaOMTprom 93-23.1 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGATAGGGCAACCAGATTTGAATTAATAAATTGATGATACAATGTGAAGTAAATTAATTAGTT 623

FaOMTprom 93-23.3 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGATAGGGCAACCAGATTTGAATTAATAAATTGATGATACAATGTGAAGTAAATTAATTAGTT 623

FaOMTprom 93-23.6 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGATAGGGCAACCAGATTTGAATTAATAAATTGATGATACAATGTGAAGTAAATTAATTAGTT 623

FaOMTprom 93-62.2 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 620

FaOMTprom 93-62.5 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 620

FaOMTprom 93-62.6 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 620

FaOMTprom 1392.1 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 636

FaOMTprom 1392.3 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 617

FaOMTprom 1392.5 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 631

FvOMTprom gene12447 TTTAATCTTCACTCTGCAGAATTAGATGAA-GTGAATGGA-GAAAGCTAGGGCAACCAGATTTGAATTAATAAATTGA---TACAATGTGAAGTAAATTAATTAGTT 640

DOF O2-motif MBS MYBL

670 680 690 700 710 720 730 740 750 760 770

FaOMTprom 93-23.1 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATG--AGCTCACCTCAACTGATGTGATCACCAGCTTAATTTGGTGGTGTACGTTTCAAGTAAGCAGGACA 731

FaOMTprom 93-23.3 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATG--AGCTCACCTCAACTGATGTGATCACCAGCTTAATTTGGTGGTGTACGTTTCAAGTAAGCAGGACA 731

FaOMTprom 93-23.6 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATG--AGCTCACCTCAACTGATGTGATCACCAGCTTAATTTGGTGGTGTACGTTTCAAGTAAGCAGGACA 731

FaOMTprom 93-62.2 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATG--AGCTCACCTCAACTGATGTGATCACCAGCTTAATTTGGTGGTGTACGTTTCAAGTAAGCAGGACA 728

FaOMTprom 93-62.5 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATG--AGCTCACCTCAACTGATGTGATCACCAGCTTAATTTGGTGGTGTACGTTTCAAGTAAGCAGGACA 728

FaOMTprom 93-62.6 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATG--AGCTCACCTCAACTGATGTGATCACCAGCTTAATTTGGTGGTGTACGTTTCAAGTAAGCAGGACA 728

FaOMTprom 1392.1 AGGTCGACTATAGTGTGTCATGTGAAGAATTGGTCCATA--AGCTCACCTCAACTGATGTGATCTCCGAGCTTAATTTGGTGGTGTACCTTTCAAGTAAGCAGGACA 744

FaOMTprom 1392.3 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATATAAGCTCACCTCAACTGATGTGATCTCCGAGCTTAATTTGGTGGTGTACCTTTCAAGTAAGCAGGACA 727

FaOMTprom 1392.5 AGGTCGACTATAGTGTGTCATGTGAAGAATTGGTCCATA--AGCTCACCTCAACTGATGTGATCTCCGAGCTTAATTTGGTGGTGTACCTTTCAAGTAAGCAGGACA 739

FvOMTprom gene12447 AGGTCCTACTATAGTGTGTCATGTGAAGAATTGGTCCATA--AGCTCACCTCAACTGATGTGATCTCCGAGCTTAATTTGGTGGTGTACCTTTCAAGTAAGCAGGACA 748

GCN4 motif AuxRR-core MBS ACGT-box

780 790 800 810 820 830 840 850 860 870 880

FaOMTprom 93-23.1 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 836

FaOMTprom 93-23.3 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 836

FaOMTprom 93-23.6 AGGTACAATAGTTTGTTCCTTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 836

FaOMTprom 93-62.2 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 833

FaOMTprom 93-62.5 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 833

FaOMTprom 93-62.6 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 833

FaOMTprom 1392.1 AGGTACAATAGTTTGTTCACCTATAAATTAAGTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGTAAATGCTGTGTC 854

FaOMTprom 1392.3 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGT-GATTGTTTGTGTA 832

FaOMTprom 1392.5 AGGTACAATAGTTTGTTCACCTATAAATTAAGTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGTAAATGCTGTGTC 849

FvOMTprom gene12447 AGGTACAATAGTTTGTTCACCTATAAATTA---GTACTTAAATTAAGAGGTTAAATGTTATCACAATGACATGATCATTACGAAAAGGACTAGTAAATGCTGTGTC 854

G11-box I-box WUN-Motif

890 900 910 920 930 940 950 960 970 980 990

FaOMTprom 93-23.1 CTCA----- 841  
 FaOMTprom 93-23.3 CTCA----- 841  
 FaOMTprom 93-23.6 CTCA----- 841  
 FaOMTprom 93-62.2 CTCA----- 839  
 FaOMTprom 93-62.5 CTCA----- 839  
 FaOMTprom 93-62.6 CTCA----- 839  
 FaOMTprom 1392.1 CTCAATCTATTATAAGAACCTTTTATTATGCGATAAATAATCGTTACTATCTACAAAATAAAATGGTTGTGAGCCTGCCTTCGTGCCGAAGTTACGGTAAAAACACGCA 964  
 FaOMTprom 1392.3 CTCAATCTCTTTATAAGAACCTTTTATTATGCGATAAATAATCGTTACTATCTACAAAATAAAATGGTTGTGAGCCTGCCTTCATGCCGAAGTTACGGTAAAAACACATA 942  
 FaOMTprom 1392.5 CTCAATCTATTATAAGAACCTTTTATTATGCGATAAATAATCGTTACTATCTACAAAATAAAATGGTTGTGAGCCTGCCTTCGTGCCGAAGTTACGGTAAAAACACGCA 958  
 FvOMTprom gene12447 CTCAATCTATTATAAGAACCTTTTATTATGCGATAAATAATCGTTACTATCTACAAAATAAAATGGTTGTGAGCCTGCCTTCGTGCCGAAGTTACGGTAAAAACACGCA 964

1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1100

FaOMTprom 93-23.1 ----- 855  
 FaOMTprom 93-23.3 ----- 855  
 FaOMTprom 93-23.6 ----- 855  
 FaOMTprom 93-62.2 ----- 857  
 FaOMTprom 93-62.5 ----- 857  
 FaOMTprom 93-62.6 ----- 857  
 FaOMTprom 1392.1 TCATCTCAAAGTTTGTAGAA-CAGTTACATATTTGGGATTACATTCAGAGTAGATACAATACTAAATTCCTACTAAAAATA----- 1046  
 FaOMTprom 1392.3 TTATCCCAATTTTTTATAGAAACAGTTACATATTTGGGATCAGTTACATCATTAGTCTTCGTATTTAAGAGTTCTTACAATACCT-----AAGTTTACTAAA 1039  
 FaOMTprom 1392.5 TCATCTCAAAGTTTGTAGAA-CAGTTACATATTTGGGATTACATTCAGAGTAGATACAATACTAAATTCCTACTAAAAATA----- 1040  
 FvOMT-prom gene12447 TCATCTCAAAGTTTGTAGAA-CAGTTACATATTTGGGATTACATTCAGAGTAGATACAATACTAAATTCCTACTAAAAATAATTCCTCATGTCATTAATTTTACATCAT 1073

1110 1120 1130 1140 1150 1160 1170 1180 1190 1200 1210

FaOMTprom 93-23.1 -----AACAGAAAAGTTTAC-----TTAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 913  
 FaOMTprom 93-23.3 -----AACAGAAAAGTTTAC-----TTAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 913  
 FaOMTprom 93-23.6 -----AACAGAAAAGTTTAC-----TTAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 913  
 FaOMTprom 93-62.2 -----AACAGAAAAGTTTAC-----TTAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 941  
 FaOMTprom 93-62.5 -----AACAGAAAAGTTTAC-----TTAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 941  
 FaOMTprom 93-62.6 -----AACAGAAAAGTTTAC-----TTAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 941  
 FaOMTprom 1392.1 -----TTTATAGTGAACAAGCAGTCCATAAGTTTAAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 1136  
 FaOMTprom 1392.3 -----AAAATAAATGAACAGCTTGAACAGCTAGCCAGTCCATAAGTTTAAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 1141  
 FaOMTprom 1392.5 -----TTTATAGTGAACAAGCAGTCCATAAGTTTAAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 1130  
 FvOMTprom gene12447 ACGATGATTAACACAGATTTTATAGTGAACAAGCAGTCCATAAGTTTAAATATAGGATTAAGTAAACTTCAAGTATTTGGCAAGTAGGGTCAGGATCATGGACC 1183

GARE-motif E-box/RRE MYBL ABRE/ACGT-box AUXRR-Core

1220 1230 1240 1250 1260 1270 1280 1290 1300 1310 1320

FaOMTprom 93-23.1 TAATGCTCGACACTTTGGGTGCCTGCGAGCGCATCAAAGATGGTA-----AGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1011  
 FaOMTprom 93-23.3 TAATGCTCGACACTTTGGGTGCCTGCGAGCGCATCAAAGATGGTA-----AGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1011  
 FaOMTprom 93-23.6 TAATGCTCGACACTTTGGGTGCCTGCGAGCGCATCAAAGATGGTA-----AGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1011  
 FaOMTprom 93-62.2 TAATGCTCGACACTTTGGGTGCCTGCGAGCGCATCAAAGATGGTA-----AGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1039  
 FaOMTprom 93-62.5 TAATGCTCGACACTTTGGGTGCCTGCGAGCGCATCAAAGATGGTA-----AGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1039  
 FaOMTprom 93-62.6 TAATGCTCGACACTTTGGGTGCCTGCGAGCGCATCAAAGATGGTA-----AGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1039  
 FaOMTprom 1392.1 TAATGCTCGACACTTTGGGTGCCTGG-AGCACATCAAAGATGGTGGTGGTGAGCCAGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1245  
 FaOMTprom 1392.3 TAATGCTCGACACTTTGGGTGCCTGCGAGCATCAAAGATGGTGGTGGTGAGCCAGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1251  
 FaOMTprom 1392.5 TAATGCTCGACACTTTGGGTGCCTGG-AGCACATCAAAGATGGTGGTGGTGAGCCAGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1239  
 FvOMTprom gene12447 TAATGCTCGACACTTTGGGTGCCTGGGAGCACATCAAAGATGGTGGTGGTGAGCCAGACCACCATATATGTAACCCCACTCACTATTATCATCTCCACAACCTAAC 1293

TATA box

1330 1340 1350 1360 1370 1380 1390 1400 1410

FaOMTprom 93-23.1 CTGC-----TTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1097  
 FaOMTprom 93-23.3 CTGC-----TTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1097  
 FaOMTprom 93-23.6 CTGC-----TTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1097  
 FaOMTprom 93-62.2 CTGC-----TTCTTCTCTGTCTCTCTAGCTCTATCTAGCACTACCTCATCACTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1129  
 FaOMTprom 93-62.5 CTGC-----TTCTTCTCTGTCTCTCTAGCTCTATCTAGCACTACCTCATCACTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1129  
 FaOMTprom 93-62.6 CTGC-----TTCTTCTCTGTCTCTCTAGCTCTATCTAGCACTACCTCATCACTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1129  
 FaOMTprom 1392.1 CGGCCTGTTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCT--TCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1332  
 FaOMTprom 1392.3 CTGCGAA-TTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCTTCTTCTACATCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1340  
 FaOMTprom 1392.5 CGGCCTGTTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCT--TCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1326  
 FvOMTprom gene12447 CGGCCTGTTCTTCTCTGTCTCTCT-----CTATCTAGCACTACCTCATCACTCTTCT--TCATCTTTCACAAAACCTGCAACTTAACCCAAAATG 1380

5' UTR Py-rich

ATG



**Table S1.** Pair-wise correlations among the 87 volatiles identified in the ‘232’ × ‘1392’ mapping population for year 2008. Significant correlations ( $P < 0.05$ ) are labeled in bold. The sign of the correlation coefficient indicates the direction of correlations. For volatile codes see Table I.

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	1	-0.124	-0.011	-0.037	-0.149	<b>0.266</b>	-0.125	0.055	-0.038	0.192	-0.154	-0.026	0.116	0.088	0.202	<b>-0.259</b>	-0.056	-0.123	-0.171	<b>-0.228</b>	<b>0.351</b>	<b>0.319</b>	<b>0.216</b>	0.085	-0.155	-0.079	-0.159	-0.068	-0.053	-0.052
2	-0.124	1	0.067	0.013	0.173	-0.069	0.128	0.079	<b>0.299</b>	<b>0.416</b>	0.026	0.116	-0.017	-0.014	-0.052	0.076	-0.030	0.014	0.162	-0.147	-0.043	-0.044	<b>0.292</b>	-0.034	0.068	0.041	-0.081	0.059	0.202	0.128
3	-0.011	0.067	1	-0.018	<b>0.228</b>	-0.112	0.163	0.194	-0.012	<b>-0.212</b>	<b>0.320</b>	0.024	-0.074	0.174	0.116	0.171	<b>0.372</b>	<b>0.401</b>	<b>0.346</b>	<b>0.421</b>	<b>-0.364</b>	-0.071	-0.092	-0.052	<b>0.208</b>	<b>0.290</b>	<b>0.305</b>	0.056	0.127	-0.025
4	-0.037	0.013	-0.018	1	<b>0.219</b>	0.151	0.147	0.015	-0.073	-0.100	<b>0.466</b>	<b>0.346</b>	-0.075	0.069	0.061	<b>0.511</b>	0.196	0.131	-0.020	-0.024	0.011	<b>-0.270</b>	-0.058	0.167	<b>0.214</b>	0.161	-0.076	0.109	<b>0.378</b>	0.145
5	-0.149	0.173	<b>0.228</b>	<b>0.219</b>	1	0.163	<b>0.674</b>	-0.001	<b>0.363</b>	-0.073	<b>0.515</b>	<b>0.414</b>	0.087	-0.015	-0.021	<b>0.618</b>	<b>0.284</b>	<b>0.272</b>	0.069	0.080	-0.065	<b>-0.417</b>	0.138	0.121	<b>0.599</b>	0.147	0.052	-0.050	<b>0.704</b>	0.118
6	<b>0.266</b>	-0.069	-0.112	0.151	0.163	1	0.112	0.142	-0.088	<b>0.296</b>	0.092	0.054	0.110	<b>0.211</b>	<b>0.251</b>	0.119	<b>0.207</b>	0.018	-0.107	-0.170	<b>0.543</b>	-0.076	0.123	<b>0.596</b>	0.026	<b>0.321</b>	-0.124	0.187	0.107	<b>0.326</b>
7	-0.125	0.128	0.163	0.147	<b>0.674</b>	0.112	1	-0.080	0.147	-0.098	<b>0.328</b>	<b>0.445</b>	-0.053	-0.076	-0.084	<b>0.462</b>	<b>0.241</b>	<b>0.266</b>	0.076	0.100	-0.077	<b>-0.344</b>	-0.024	-0.104	<b>0.601</b>	0.081	0.146	<b>-0.207</b>	<b>0.652</b>	0.031
8	0.055	0.079	0.194	0.015	-0.001	0.142	-0.080	1	-0.090	<b>0.458</b>	-0.080	-0.036	<b>0.270</b>	<b>0.591</b>	<b>0.651</b>	-0.113	-0.083	-0.169	-0.014	<b>-0.226</b>	0.147	0.102	<b>0.286</b>	<b>0.243</b>	-0.020	0.086	<b>-0.243</b>	<b>0.461</b>	-0.077	<b>0.305</b>
9	-0.038	<b>0.299</b>	-0.012	-0.073	<b>0.363</b>	-0.088	0.147	-0.090	1	0.022	0.155	-0.104	-0.020	-0.132	-0.177	0.170	0.074	0.085	0.166	0.008	-0.111	-0.185	-0.093	-0.086	<b>0.211</b>	-0.043	-0.053	-0.095	<b>0.222</b>	-0.055
10	0.192	<b>0.416</b>	<b>-0.212</b>	-0.100	-0.073	<b>0.296</b>	-0.098	<b>0.458</b>	0.022	1	-0.188	0.037	<b>0.398</b>	<b>0.238</b>	<b>0.402</b>	<b>-0.212</b>	<b>-0.243</b>	<b>-0.236</b>	-0.057	<b>-0.389</b>	<b>0.533</b>	0.177	<b>0.566</b>	<b>0.290</b>	-0.170	0.047	<b>-0.275</b>	0.191	-0.099	<b>0.359</b>
11	-0.154	0.026	<b>0.320</b>	<b>0.466</b>	<b>0.515</b>	0.092	<b>0.328</b>	-0.080	0.155	-0.188	1	<b>0.390</b>	-0.136	-0.001	-0.163	<b>0.716</b>	<b>0.283</b>	<b>0.286</b>	0.081	<b>0.216</b>	-0.124	<b>-0.270</b>	-0.048	0.002	<b>0.528</b>	0.154	0.151	-0.129	<b>0.535</b>	0.091
12	-0.026	0.116	0.024	<b>0.346</b>	<b>0.414</b>	0.054	<b>0.445</b>	-0.036	-0.104	0.037	<b>0.390</b>	1	0.174	0.102	0.067	<b>0.648</b>	-0.157	-0.007	0.124	0.099	0.014	-0.166	<b>0.297</b>	0.181	<b>0.422</b>	<b>0.219</b>	0.101	0.159	<b>0.683</b>	<b>0.294</b>
13	0.116	-0.017	-0.074	-0.075	0.087	0.110	-0.053	<b>0.270</b>	-0.020	<b>0.398</b>	-0.136	0.174	1	0.018	<b>0.422</b>	-0.038	<b>-0.249</b>	<b>-0.271</b>	0.195	0.088	<b>0.329</b>	0.060	<b>0.663</b>	<b>0.466</b>	-0.020	<b>0.344</b>	0.116	<b>0.275</b>	0.005	<b>0.344</b>
14	0.088	-0.014	0.174	0.069	-0.015	<b>0.211</b>	-0.076	<b>0.591</b>	-0.132	<b>0.238</b>	-0.001	0.102	0.018	1	<b>0.457</b>	0.094	0.013	-0.050	-0.104	-0.093	-0.005	0.119	0.124	<b>0.276</b>	0.086	<b>0.279</b>	-0.132	<b>0.652</b>	0.082	<b>0.403</b>
15	0.202	-0.052	0.116	0.061	-0.021	<b>0.251</b>	-0.084	<b>0.651</b>	-0.177	<b>0.402</b>	-0.163	0.067	<b>0.422</b>	<b>0.457</b>	1	-0.093	-0.158	-0.145	0.041	-0.131	<b>0.298</b>	<b>0.245</b>	<b>0.372</b>	<b>0.470</b>	-0.159	<b>0.279</b>	-0.134	<b>0.415</b>	-0.027	<b>0.404</b>
16	<b>-0.259</b>	0.076	0.171	<b>0.511</b>	<b>0.618</b>	0.119	<b>0.462</b>	-0.113	0.170	<b>-0.212</b>	<b>0.716</b>	<b>0.648</b>	-0.038	0.094	-0.093	1	<b>0.290</b>	<b>0.343</b>	0.198	<b>0.345</b>	-0.179	<b>-0.363</b>	0.023	0.140	<b>0.590</b>	<b>0.348</b>	<b>0.239</b>	0.016	<b>0.680</b>	0.189
17	-0.056	-0.030	<b>0.372</b>	0.196	<b>0.284</b>	<b>0.207</b>	<b>0.241</b>	-0.083	0.074	<b>-0.243</b>	<b>0.283</b>	-0.157	<b>-0.249</b>	0.013	-0.158	<b>0.290</b>	1	<b>0.863</b>	0.172	<b>0.391</b>	-0.152	<b>-0.303</b>	-0.136	0.027	<b>0.276</b>	<b>0.269</b>	0.186	-0.147	0.132	-0.123
18	-0.123	0.014	<b>0.401</b>	0.131	<b>0.272</b>	0.018	<b>0.266</b>	-0.169	0.085	<b>-0.236</b>	<b>0.286</b>	-0.007	<b>-0.271</b>	-0.050	-0.145	<b>0.343</b>	<b>0.863</b>	1	<b>0.213</b>	<b>0.462</b>	<b>-0.231</b>	-0.179	-0.116	-0.055	<b>0.288</b>	<b>0.308</b>	<b>0.263</b>	-0.171	<b>0.213</b>	-0.095
19	-0.171	0.162	<b>0.346</b>	-0.020	0.069	-0.107	0.076	-0.014	0.166	-0.057	0.081	0.124	0.195	-0.104	0.041	0.198	0.172	<b>0.213</b>	1	<b>0.604</b>	<b>-0.229</b>	-0.120	0.148	0.074	<b>0.269</b>	<b>0.386</b>	<b>0.491</b>	-0.022	0.153	0.073
20	<b>-0.228</b>	-0.147	<b>0.421</b>	-0.024	0.080	-0.170	0.100	<b>-0.226</b>	0.008	<b>-0.389</b>	<b>0.216</b>	0.099	0.088	-0.093	-0.131	<b>0.345</b>	<b>0.391</b>	<b>0.462</b>	<b>0.604</b>	1	<b>-0.358</b>	-0.104	-0.027	0.028	<b>0.261</b>	<b>0.419</b>	<b>0.796</b>	-0.119	0.126	-0.052
21	<b>0.351</b>	-0.043	<b>-0.364</b>	0.011	-0.065	<b>0.543</b>	-0.077	0.147	-0.111	<b>0.533</b>	-0.124	0.014	<b>0.329</b>	-0.005	<b>0.298</b>	-0.179	-0.152	<b>-0.231</b>	<b>-0.229</b>	<b>-0.358</b>	1	0.097	<b>0.370</b>	<b>0.483</b>	-0.158	-0.031	-0.204	0.037	-0.112	<b>0.350</b>
22	<b>0.319</b>	-0.044	-0.071	<b>-0.270</b>	<b>-0.417</b>	-0.076	<b>-0.344</b>	0.102	-0.185	0.177	<b>-0.270</b>	-0.166	0.060	0.119	<b>0.245</b>	<b>-0.363</b>	<b>-0.303</b>	-0.179	-0.120	-0.104	0.097	1	0.170	-0.017	<b>-0.439</b>	-0.089	-0.007	0.117	<b>-0.285</b>	-0.014
23	<b>0.216</b>	<b>0.292</b>	-0.092	-0.058	0.138	0.123	-0.024	<b>0.286</b>	-0.093	<b>0.566</b>	-0.048	<b>0.297</b>	<b>0.663</b>	0.124	<b>0.372</b>	0.023	-0.136	-0.116	0.148	-0.027	<b>0.370</b>	0.170	1	<b>0.327</b>	0.036	0.195	0.040	0.181	0.104	<b>0.294</b>
24	0.085	-0.034	-0.052	0.167	0.121	<b>0.596</b>	-0.104	<b>0.243</b>	-0.086	<b>0.290</b>	0.002	0.181	<b>0.466</b>	<b>0.276</b>	<b>0.470</b>	0.140	0.027	-0.055	0.074	0.028	<b>0.483</b>	-0.017	<b>0.327</b>	1	-0.049	<b>0.587</b>	-0.039	<b>0.492</b>	0.026	<b>0.669</b>
25	-0.155	0.068	<b>0.208</b>	<b>0.214</b>	<b>0.599</b>	0.026	<b>0.601</b>	-0.020	<b>0.211</b>	-0.170	<b>0.528</b>	<b>0.422</b>	-0.020	0.086	-0.159	<b>0.590</b>	<b>0.276</b>	<b>0.288</b>	<b>0.269</b>	<b>0.261</b>	-0.158	<b>-0.439</b>	0.036	-0.049	1	0.200	<b>0.231</b>	-0.101	<b>0.670</b>	0.095
26	-0.079	0.041	<b>0.290</b>	0.161	0.147	<b>0.321</b>	0.081	0.086	-0.043	0.047	0.154	<b>0.219</b>	<b>0.344</b>	<b>0.279</b>	<b>0.279</b>	<b>0.348</b>	<b>0.269</b>	<b>0.308</b>	<b>0.386</b>	<b>0.419</b>	-0.031	-0.089	0.195	<b>0.587</b>	0.200	1	<b>0.323</b>	<b>0.408</b>	<b>0.213</b>	<b>0.447</b>
27	-0.159	-0.081	<b>0.305</b>	-0.076	0.052	-0.124	0.146	<b>-0.243</b>	-0.053	<b>-0.275</b>	0.151	0.101	0.116	-0.132	-0.134	<b>0.239</b>	0.186	<b>0.263</b>	<b>0.491</b>	<b>0.796</b>	-0.204	-0.007	0.040	-0.039	<b>0.231</b>	<b>0.323</b>	1	-0.165	0.133	-0.062
28	-0.068	0.059	0.056	0.109	-0.050	0.187	<b>-0.207</b>	<b>0.461</b>	-0.095	0.191	-0.129	0.159	<b>0.275</b>	<b>0.652</b>	<b>0.415</b>	0.016	-0.147	-0.171	-0.022	-0.119	0.037	0.117	0.181	<b>0.492</b>	-0.101	<b>0.408</b>	-0.165	1	0.016	<b>0.585</b>
29	-0.053	0.202	0.127	<b>0.378</b>	<b>0.704</b>	0.107	<b>0.652</b>	-0.077	<b>0.222</b>	-0.099	<b>0.535</b>	<b>0.683</b>	0.005	0.082	-0.027	<b>0.680</b>	0.132	<b>0.213</b>	0.153	0.126	-0.112	<b>-0.285</b>	0.104	0.026	<b>0.670</b>	<b>0.213</b>	0.133	0.016	1	0.134
30	-0.052	0.128	-0.025	0.145	0.118	<b>0.326</b>	0.031	<b>0.305</b>	-0.055	<b>0.359</b>	0.091	<b>0.294</b>	<b>0.344</b>	<b>0.403</b>	<b>0.404</b>	0.189	-0.123	-0.095	0.073	-0.052	<b>0.350</b>	-0.014	<b>0.294</b>	<b>0.669</b>	0.095	<b>0.447</b>	-0.062	<b>0.585</b>	0.134	1
31	<b>0.228</b>	0.078	0.035	0.107	<b>0.405</b>	<b>0.316</b>	<b>0.443</b>	0.090	0.105	<b>0.271</b>	0.121	<b>0.212</b>	0.004	0.099	<b>0.221</b>	0.117	0.159	0.169	0.064	-0.108	0.184	-0.025	0.140	0.162	<b>0.301</b>	0.147	0.006	0.033	<b>0.410</b>	0.102
32	0.133	0.176	-0.083	<b>0.268</b>	<b>0.272</b>	<b>0.387</b>	<b>0.251</b>	0.047	0.184	0.160	<b>0.215</b>	<b>0.319</b>	-0.104	<b>0.293</b>	0.127	<b>0.319</b>	0.050	0.015	-0.008	-0.128	<b>0.248</b>	-0.067	0.083	<b>0.293</b>	<b>0.375</b>	<b>0.232</b>	-0.112	0.148	<b>0.424</b>	<b>0.280</b>
33	<b>0.249</b>	-0.062	<b>-0.208</b>	-0.144	0.023	<b>0.230</b>	0.021	<b>0.305</b>	-0.107	<b>0.544</b>	<b>-0.249</b>	0.082	<b>0.780</b>	-0.098	<b>0.519</b>	<b>-0.219</b>	<b>-0.286</b>	<b>-0.253</b>	-0.002	<b>-0.215</b>	<b>0.534</b>	0.144	<b>0.586</b>	<b>0.340</b>	-0.158	0.153	-0.129	0.100	-0.072	<b>0.277</b>
34	-0.167	<b>0.309</b>	0.074	0.058	<b>0.665</b>	-0.004	<b>0.519</b>	0.045	<b>0.347</b>	0.074	<b>0.293</b>	<b>0.550</b>	0.035	0.117	0.015	<b>0.393</b>	-0.102	0.034	0.086	-0.074	-0.100	-0.150	0.123	0.027	<b>0.530</b>	0.078	-0.081	0.102	<b>0.740</b>	0.171
35	0.103	<b>0.283</b> </																												

Table S1 Continued.

Code	31	32	33	34	35	36	37	38	39	40	41	42	43	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
1	<b>0.228</b>	0.133	<b>0.249</b>	-0.167	0.103	-0.154	-0.004	-0.112	-0.126	-0.151	-0.205	0.195	0.172	-0.088	-0.072	-0.099	0.101	-0.139	0.073	0.107	<b>0.341</b>	-0.021	0.138	-0.065	-0.138	-0.010	0.088	0.038	0.190
2	0.078	0.176	-0.062	<b>0.309</b>	<b>0.283</b>	0.112	-0.041	0.071	0.066	0.048	0.065	-0.043	0.001	<b>0.319</b>	-0.015	<b>0.242</b>	0.117	<b>0.220</b>	-0.030	-0.025	-0.031	-0.060	0.120	0.129	0.078	0.166	0.141	<b>0.238</b>	0.011
3	0.035	-0.083	<b>-0.208</b>	0.074	-0.061	-0.190	<b>0.291</b>	<b>0.296</b>	0.086	<b>0.383</b>	<b>0.440</b>	-0.034	0.155	-0.067	-0.023	0.122	-0.049	0.059	<b>-0.240</b>	-0.021	<b>-0.287</b>	-0.038	0.057	-0.117	<b>0.568</b>	-0.017	-0.125	<b>0.459</b>	<b>-0.207</b>
4	0.107	<b>0.268</b>	-0.144	0.058	0.042	-0.059	0.151	<b>0.227</b>	-0.092	0.151	0.200	0.093	0.043	0.110	0.005	0.069	-0.084	<b>0.222</b>	0.098	0.038	0.015	-0.087	0.152	-0.005	-0.006	-0.073	0.012	-0.104	-0.119
5	<b>0.405</b>	<b>0.272</b>	0.023	<b>0.665</b>	-0.136	-0.087	<b>0.445</b>	<b>0.309</b>	<b>0.560</b>	<b>0.263</b>	0.170	0.112	0.019	0.115	0.095	<b>0.498</b>	0.031	<b>0.717</b>	0.009	0.162	-0.002	0.025	<b>0.225</b>	<b>0.317</b>	0.193	-0.095	0.043	<b>0.325</b>	0.041
6	<b>0.316</b>	<b>0.387</b>	<b>0.230</b>	-0.004	<b>0.251</b>	<b>-0.232</b>	<b>0.565</b>	0.125	-0.071	0.202	0.151	<b>0.468</b>	0.189	0.086	-0.067	-0.145	<b>0.208</b>	0.057	0.127	0.119	<b>0.380</b>	-0.024	<b>0.283</b>	-0.046	-0.008	0.129	0.008	0.157	0.192
7	<b>0.443</b>	<b>0.251</b>	0.021	<b>0.519</b>	-0.190	-0.167	<b>0.438</b>	0.171	<b>0.478</b>	<b>0.231</b>	0.205	-0.074	-0.139	0.170	<b>0.277</b>	<b>0.371</b>	-0.101	<b>0.663</b>	-0.146	<b>0.262</b>	-0.072	-0.009	0.193	<b>0.253</b>	0.091	-0.144	<b>0.227</b>	<b>0.292</b>	-0.066
8	0.090	0.047	<b>0.305</b>	0.045	<b>0.351</b>	-0.141	-0.052	0.053	-0.013	<b>0.210</b>	0.041	<b>0.445</b>	<b>0.390</b>	0.146	0.123	-0.044	<b>0.320</b>	0.009	-0.026	-0.137	0.040	0.042	<b>0.223</b>	0.005	<b>0.253</b>	<b>0.415</b>	-0.012	0.097	<b>0.224</b>
9	0.105	0.184	-0.107	<b>0.347</b>	-0.011	0.165	0.032	0.044	<b>0.335</b>	-0.036	-0.062	-0.038	-0.094	-0.104	-0.001	<b>0.346</b>	-0.018	<b>0.206</b>	-0.001	0.168	-0.109	-0.074	0.017	<b>0.289</b>	-0.055	-0.143	0.023	0.172	0.017
10	<b>0.271</b>	0.160	<b>0.544</b>	0.074	<b>0.665</b>	-0.070	-0.112	-0.132	0.019	0.119	-0.155	<b>0.442</b>	<b>0.263</b>	<b>0.447</b>	-0.166	-0.045	<b>0.428</b>	0.002	0.198	0.038	<b>0.428</b>	-0.008	0.131	0.153	-0.107	<b>0.280</b>	<b>0.283</b>	-0.079	<b>0.543</b>
11	0.121	<b>0.215</b>	<b>-0.249</b>	<b>0.293</b>	-0.181	-0.085	<b>0.324</b>	<b>0.311</b>	<b>0.356</b>	0.089	<b>0.253</b>	-0.098	-0.165	0.003	-0.108	<b>0.324</b>	-0.061	<b>0.434</b>	-0.117	<b>0.227</b>	-0.102	-0.133	0.081	0.158	<b>0.312</b>	-0.055	-0.043	0.192	<b>-0.242</b>
12	<b>0.212</b>	<b>0.319</b>	0.082	<b>0.550</b>	0.094	-0.020	<b>0.259</b>	0.116	<b>0.382</b>	<b>0.218</b>	-0.021	0.122	<b>0.211</b>	0.163	0.090	<b>0.364</b>	0.113	<b>0.712</b>	0.201	0.197	0.053	0.008	<b>0.215</b>	<b>0.377</b>	0.032	0.106	<b>0.451</b>	0.032	0.158
13	0.004	-0.104	<b>0.780</b>	0.035	<b>0.207</b>	-0.072	0.019	0.085	<b>0.230</b>	<b>0.405</b>	-0.184	<b>0.481</b>	<b>0.387</b>	0.063	-0.174	-0.028	<b>0.295</b>	0.048	<b>0.448</b>	0.000	<b>0.312</b>	-0.083	-0.194	<b>0.210</b>	<b>-0.241</b>	0.167	0.091	-0.120	<b>0.798</b>
14	0.099	<b>0.293</b>	-0.098	0.117	<b>0.505</b>	0.084	0.151	<b>0.250</b>	0.052	<b>0.240</b>	<b>0.295</b>	<b>0.444</b>	<b>0.508</b>	0.147	<b>0.228</b>	0.063	<b>0.209</b>	0.091	-0.032	-0.001	-0.096	0.070	<b>0.400</b>	0.128	<b>0.233</b>	<b>0.562</b>	0.137	<b>0.250</b>	0.034
15	<b>0.221</b>	0.127	<b>0.519</b>	0.015	<b>0.338</b>	-0.099	0.001	-0.031	-0.131	<b>0.242</b>	-0.045	<b>0.751</b>	<b>0.717</b>	0.062	-0.072	-0.129	<b>0.394</b>	-0.040	0.164	-0.013	<b>0.262</b>	-0.004	0.181	-0.076	-0.008	<b>0.272</b>	0.038	-0.001	<b>0.369</b>
16	0.117	<b>0.319</b>	<b>-0.219</b>	<b>0.393</b>	-0.106	-0.042	<b>0.528</b>	<b>0.448</b>	<b>0.419</b>	<b>0.242</b>	<b>0.346</b>	0.014	-0.029	0.016	0.073	<b>0.333</b>	-0.048	<b>0.621</b>	0.005	0.192	-0.140	-0.039	0.197	<b>0.281</b>	0.115	-0.156	0.123	0.185	-0.169
17	0.159	0.050	<b>-0.286</b>	-0.102	-0.175	<b>-0.308</b>	<b>0.449</b>	<b>0.652</b>	-0.008	<b>0.403</b>	<b>0.762</b>	-0.075	-0.198	-0.168	-0.010	-0.105	-0.053	0.014	<b>-0.241</b>	-0.005	-0.160	-0.015	0.166	-0.166	<b>0.305</b>	-0.200	<b>-0.248</b>	<b>0.316</b>	<b>-0.361</b>
18	0.169	0.015	<b>-0.253</b>	0.034	-0.167	<b>-0.276</b>	<b>0.427</b>	<b>0.588</b>	0.070	<b>0.442</b>	<b>0.718</b>	-0.102	-0.132	-0.134	-0.039	-0.001	-0.020	0.138	-0.161	0.034	-0.177	0.026	0.174	-0.043	<b>0.272</b>	-0.169	-0.072	<b>0.311</b>	<b>-0.295</b>
19	0.064	-0.008	-0.002	0.086	-0.023	-0.012	0.214	<b>0.305</b>	<b>0.228</b>	<b>0.333</b>	<b>0.349</b>	0.013	0.012	-0.161	-0.110	0.103	<b>0.240</b>	0.083	0.007	-0.006	-0.196	-0.062	-0.091	0.148	0.116	-0.054	0.014	<b>0.319</b>	0.020
20	-0.108	-0.128	<b>-0.215</b>	-0.074	<b>-0.296</b>	0.029	<b>0.377</b>	<b>0.469</b>	<b>0.242</b>	<b>0.313</b>	<b>0.455</b>	-0.084	-0.112	<b>-0.230</b>	-0.041	-0.042	-0.046	0.048	-0.014	0.079	<b>-0.296</b>	-0.103	-0.117	0.044	0.094	<b>-0.223</b>	-0.138	<b>0.238</b>	-0.181
21	0.184	<b>0.248</b>	<b>0.534</b>	-0.100	<b>0.300</b>	-0.128	-0.045	<b>-0.228</b>	-0.078	-0.023	<b>-0.255</b>	<b>0.407</b>	0.142	<b>0.263</b>	-0.155	-0.102	0.185	-0.078	<b>0.334</b>	0.109	<b>0.858</b>	-0.091	0.158	-0.003	<b>-0.301</b>	0.054	0.078	<b>-0.209</b>	<b>0.395</b>
22	-0.025	-0.067	0.144	-0.150	0.108	0.111	-0.161	<b>-0.326</b>	-0.167	<b>-0.277</b>	-0.200	0.151	<b>0.239</b>	0.001	-0.052	<b>-0.245</b>	<b>0.233</b>	<b>-0.227</b>	-0.080	-0.155	0.010	-0.050	0.054	-0.137	-0.075	0.101	-0.031	-0.088	0.152
23	0.140	0.083	<b>0.586</b>	0.123	<b>0.344</b>	-0.031	-0.043	0.157	0.204	<b>0.206</b>	-0.076	<b>0.408</b>	<b>0.334</b>	<b>0.209</b>	-0.186	0.039	<b>0.406</b>	0.177	0.191	0.029	<b>0.363</b>	-0.021	0.086	<b>0.214</b>	-0.123	<b>0.245</b>	<b>0.208</b>	0.044	<b>0.562</b>
24	0.162	<b>0.293</b>	<b>0.340</b>	0.027	<b>0.397</b>	-0.187	<b>0.399</b>	<b>0.224</b>	-0.072	<b>0.460</b>	0.043	<b>0.791</b>	<b>0.564</b>	0.117	-0.091	-0.114	<b>0.392</b>	0.004	<b>0.504</b>	0.005	<b>0.435</b>	-0.010	<b>0.232</b>	-0.031	-0.083	<b>0.332</b>	-0.052	-0.013	<b>0.456</b>
25	<b>0.301</b>	<b>0.375</b>	-0.158	<b>0.530</b>	<b>-0.236</b>	-0.028	<b>0.342</b>	<b>0.418</b>	<b>0.746</b>	<b>0.238</b>	<b>0.340</b>	-0.101	<b>-0.209</b>	-0.047	<b>0.211</b>	<b>0.594</b>	-0.067	<b>0.684</b>	-0.115	<b>0.287</b>	-0.168	-0.081	0.161	<b>0.618</b>	0.177	-0.187	<b>0.288</b>	<b>0.251</b>	-0.163
26	0.147	<b>0.232</b>	0.153	0.078	<b>0.226</b>	-0.111	<b>0.617</b>	<b>0.540</b>	0.089	<b>0.706</b>	<b>0.448</b>	<b>0.477</b>	<b>0.414</b>	-0.030	0.013	0.083	<b>0.218</b>	0.113	<b>0.248</b>	0.102	-0.051	-0.083	<b>0.235</b>	0.074	0.013	<b>0.237</b>	0.034	<b>0.325</b>	<b>0.242</b>
27	0.006	-0.112	-0.129	-0.081	<b>-0.244</b>	0.050	<b>0.341</b>	<b>0.231</b>	<b>0.274</b>	0.194	<b>0.283</b>	-0.110	-0.168	<b>-0.232</b>	-0.080	-0.019	-0.137	0.027	0.008	0.148	-0.165	-0.091	-0.132	0.088	-0.015	-0.181	-0.069	0.189	-0.128
28	0.033	0.148	0.100	0.102	<b>0.611</b>	-0.087	0.047	0.124	-0.124	<b>0.411</b>	0.060	<b>0.501</b>	<b>0.751</b>	0.190	<b>0.214</b>	-0.091	<b>0.225</b>	0.055	<b>0.274</b>	-0.084	-0.033	0.193	<b>0.301</b>	0.024	0.064	<b>0.816</b>	0.069	0.067	<b>0.380</b>
29	<b>0.410</b>	<b>0.424</b>	-0.072	<b>0.740</b>	-0.089	0.017	<b>0.416</b>	<b>0.286</b>	<b>0.610</b>	<b>0.209</b>	0.193	0.035	0.053	0.035	0.191	<b>0.597</b>	0.026	<b>0.872</b>	0.080	<b>0.299</b>	-0.086	0.003	<b>0.311</b>	<b>0.531</b>	0.061	-0.028	<b>0.362</b>	<b>0.286</b>	-0.012
30	0.102	<b>0.280</b>	<b>0.277</b>	0.171	<b>0.428</b>	-0.106	0.204	0.112	0.012	<b>0.380</b>	-0.013	<b>0.598</b>	<b>0.492</b>	<b>0.444</b>	-0.060	0.098	<b>0.310</b>	0.187	<b>0.284</b>	0.042	<b>0.234</b>	-0.051	<b>0.293</b>	0.062	-0.036	<b>0.501</b>	0.129	-0.007	<b>0.406</b>
31	1	<b>0.342</b>	0.142	<b>0.369</b>	0.205	-0.204	<b>0.239</b>	0.088	<b>0.248</b>	0.193	0.079	<b>0.266</b>	0.176	0.114	0.081	0.166	<b>0.290</b>	<b>0.335</b>	0.089	<b>0.294</b>	0.107	0.126	<b>0.323</b>	<b>0.239</b>	0.067	0.127	<b>0.238</b>	<b>0.255</b>	0.138
32	<b>0.342</b>	1	-0.056	<b>0.424</b>	<b>0.230</b>	<b>0.229</b>	<b>0.286</b>	0.114	<b>0.228</b>	0.087	0.136	<b>0.240</b>	0.146	0.133	0.146	<b>0.454</b>	<b>0.296</b>	<b>0.461</b>	0.047	<b>0.257</b>	0.154	-0.042	<b>0.677</b>	<b>0.377</b>	-0.025	0.079	<b>0.405</b>	<b>0.235</b>	-0.072
33	0.142	-0.056	1	0.025	<b>0.205</b>	-0.143	-0.048	-0.183	0.021	<b>0.252</b>	-0.321	<b>0.463</b>	<b>0.347</b>	<b>0.227</b>	-0.124	-0.065	<b>0.326</b>	0.018	<b>0.352</b>	0.011	<b>0.499</b>	-0.049	-0.077	0.081	<b>-0.244</b>	0.097	0.142	-0.149	<b>0.814</b>
34	<b>0.369</b>	<b>0.424</b>	0.025	1	0.014	<b>0.224</b>	0.183	0.130	<b>0.604</b>	0.169	0.026	0.053	0.125	0.198	<b>0.264</b>	<b>0.727</b>	0.159	<b>0.868</b>	0.120	<b>0.226</b>	-0.062	-0.104	<b>0.322</b>	<b>0.635</b>	0.152	0.071	<b>0.454</b>	<b>0.333</b>	0.115
35	0.205	<b>0.230</b>	<b>0.205</b>	0.014	1	-0.093	-0.045	0.008	-0.163	<b>0.348</b>	0.031	<b>0.471</b>	<b>0.579</b>	<b>0.390</b>	-0.019	-0.135	<b>0.299</b>	-0.066	<b>0.346</b>	0.094	<b>0.271</b>	<b>0.247</b>	<b>0.260</b>	0.051	-0.036	<b>0.657</b>	<b>0.262</b>	0.007	<b>0.463</b>
36	-0.204	<b>0.22</b>																											

Table S1 Continued.

Code	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
1	<b>0,316</b>	0,134	-0,051	<b>-0,221</b>	<b>0,273</b>	-0,001	0,055	-0,006	-0,028	-0,070	0,118	0,082	-0,184	-0,100	<b>0,230</b>	0,093	-0,021	<b>0,455</b>	0,043	<b>0,288</b>	0,059	0,183	0,105	<b>0,280</b>	0,088	<b>0,262</b>	0,202
2	-0,051	<b>0,372</b>	0,030	<b>0,220</b>	0,060	-0,058	-0,050	-0,072	0,003	<b>0,458</b>	0,027	0,082	0,033	0,041	0,080	-0,062	-0,008	-0,043	0,061	0,037	-0,082	0,064	0,069	0,163	-0,030	-0,033	-0,129
3	<b>-0,269</b>	-0,064	-0,132	-0,084	0,133	0,037	<b>-0,237</b>	0,176	0,001	-0,086	-0,084	-0,151	0,152	-0,121	-0,203	<b>-0,305</b>	0,103	<b>-0,263</b>	-0,173	-0,118	-0,047	-0,204	<b>-0,223</b>	-0,131	<b>-0,236</b>	-0,109	-0,156
4	-0,107	-0,091	-0,147	0,132	-0,016	-0,075	<b>0,207</b>	-0,133	-0,055	0,100	-0,193	<b>-0,269</b>	-0,022	0,026	-0,085	<b>-0,263</b>	-0,062	-0,117	-0,189	<b>-0,221</b>	-0,200	-0,193	-0,157	-0,114	-0,196	-0,076	<b>-0,231</b>
5	0,047	-0,153	0,105	<b>0,420</b>	<b>0,231</b>	0,054	-0,071	0,094	<b>0,351</b>	0,192	0,086	-0,130	<b>0,249</b>	0,032	-0,016	-0,039	-0,063	-0,127	0,046	0,198	0,012	0,017	-0,006	-0,020	-0,016	-0,034	0,005
6	<b>0,364</b>	0,175	0,031	-0,041	<b>0,393</b>	-0,028	-0,088	0,044	-0,012	0,018	0,005	0,102	-0,069	0,008	<b>0,207</b>	0,110	0,032	<b>0,257</b>	0,051	<b>0,213</b>	0,060	0,058	0,179	0,179	0,101	0,091	0,094
7	0,148	-0,120	0,022	<b>0,447</b>	0,124	-0,175	<b>-0,296</b>	<b>-0,232</b>	<b>0,291</b>	0,082	-0,003	0,032	<b>0,227</b>	-0,091	0,064	-0,019	-0,023	-0,138	0,044	<b>0,248</b>	0,055	0,143	-0,038	-0,148	-0,049	-0,014	-0,123
8	<b>0,300</b>	<b>0,293</b>	0,027	-0,029	<b>0,260</b>	0,100	-0,196	0,155	0,144	0,008	0,000	0,095	-0,065	<b>0,208</b>	0,202	0,158	<b>0,247</b>	<b>0,320</b>	-0,011	0,115	0,156	-0,065	0,041	0,190	0,057	-0,070	<b>0,283</b>
9	-0,177	-0,042	0,047	<b>0,239</b>	-0,048	-0,037	<b>0,218</b>	-0,087	0,074	0,029	-0,114	-0,114	-0,012	0,103	-0,130	-0,034	-0,067	-0,068	0,029	0,011	-0,121	-0,162	-0,023	0,184	0,044	<b>0,319</b>	-0,177
10	<b>0,552</b>	<b>0,637</b>	0,102	-0,004	<b>0,226</b>	0,151	-0,128	<b>0,235</b>	0,178	<b>0,274</b>	0,135	<b>0,314</b>	-0,052	<b>0,261</b>	<b>0,439</b>	<b>0,419</b>	0,166	<b>0,542</b>	<b>0,258</b>	<b>0,371</b>	<b>0,309</b>	0,134	<b>0,401</b>	<b>0,344</b>	<b>0,305</b>	<b>0,220</b>	<b>0,368</b>
11	<b>-0,232</b>	<b>-0,238</b>	-0,186	<b>0,264</b>	0,018	0,034	0,031	0,200	0,189	-0,047	-0,062	<b>-0,237</b>	<b>0,233</b>	-0,028	<b>-0,249</b>	<b>-0,366</b>	-0,197	<b>-0,328</b>	<b>-0,225</b>	-0,168	-0,191	<b>-0,209</b>	<b>-0,228</b>	<b>-0,236</b>	<b>-0,301</b>	-0,059	<b>-0,223</b>
12	0,135	0,070	<b>0,255</b>	<b>0,464</b>	0,159	0,011	-0,048	-0,016	<b>0,471</b>	0,155	<b>0,235</b>	0,106	0,071	0,039	0,188	0,058	-0,133	-0,103	0,194	0,132	0,009	<b>0,211</b>	0,143	0,086	0,105	-0,063	0,133
13	<b>0,303</b>	0,116	<b>0,577</b>	-0,027	-0,006	<b>0,266</b>	-0,167	<b>0,244</b>	<b>0,416</b>	0,070	<b>0,420</b>	<b>0,283</b>	0,102	<b>0,305</b>	0,063	<b>0,616</b>	<b>0,417</b>	<b>0,380</b>	<b>0,558</b>	<b>0,271</b>	<b>0,508</b>	-0,056	<b>0,366</b>	0,023	<b>0,535</b>	0,077	<b>0,371</b>
14	-0,012	<b>0,369</b>	-0,073	0,159	<b>0,398</b>	0,166	-0,112	0,153	<b>0,206</b>	-0,011	-0,038	0,123	0,012	0,067	0,174	-0,115	0,097	0,203	-0,166	0,056	-0,164	-0,124	0,051	<b>0,382</b>	-0,037	0,086	<b>0,240</b>
15	<b>0,460</b>	0,197	0,119	-0,134	<b>0,314</b>	0,006	<b>-0,266</b>	0,153	0,094	-0,006	-0,005	0,070	<b>-0,258</b>	0,129	<b>0,236</b>	<b>0,255</b>	<b>0,437</b>	<b>0,465</b>	0,058	<b>0,213</b>	0,185	-0,032	0,138	<b>0,215</b>	0,130	-0,006	<b>0,318</b>
16	<b>-0,222</b>	-0,182	-0,051	<b>0,477</b>	0,082	0,050	0,071	-0,014	<b>0,274</b>	0,054	-0,077	-0,199	0,128	-0,020	-0,203	<b>-0,307</b>	-0,124	<b>-0,354</b>	-0,164	-0,200	<b>-0,210</b>	<b>-0,209</b>	-0,188	-0,173	<b>-0,210</b>	-0,122	<b>-0,220</b>
17	-0,194	-0,190	<b>-0,320</b>	-0,094	0,059	0,071	-0,112	-0,021	<b>-0,309</b>	-0,102	<b>-0,240</b>	<b>-0,354</b>	0,176	<b>-0,271</b>	<b>-0,249</b>	<b>-0,409</b>	-0,143	<b>-0,245</b>	<b>-0,408</b>	<b>-0,340</b>	-0,117	<b>-0,207</b>	<b>-0,389</b>	<b>-0,281</b>	<b>-0,353</b>	-0,102	<b>-0,291</b>
18	-0,129	-0,172	<b>-0,275</b>	0,042	0,032	0,004	-0,106	0,023	<b>-0,242</b>	-0,020	<b>-0,228</b>	<b>-0,278</b>	0,112	<b>-0,239</b>	-0,128	<b>-0,324</b>	-0,126	<b>-0,258</b>	<b>-0,333</b>	<b>-0,291</b>	-0,097	-0,112	<b>-0,288</b>	<b>-0,240</b>	<b>-0,284</b>	-0,112	<b>-0,263</b>
19	<b>-0,244</b>	-0,045	-0,002	0,086	-0,007	-0,037	-0,065	0,024	0,179	-0,074	-0,075	-0,016	0,102	-0,119	<b>-0,341</b>	-0,120	0,067	-0,117	-0,074	-0,123	0,028	<b>-0,361</b>	-0,133	-0,133	-0,091	0,058	-0,155
20	<b>-0,464</b>	<b>-0,358</b>	-0,031	0,032	-0,087	0,095	-0,048	-0,008	0,077	-0,147	-0,047	-0,179	<b>0,239</b>	-0,175	<b>-0,524</b>	<b>-0,290</b>	-0,018	<b>-0,317</b>	-0,152	<b>-0,324</b>	-0,084	<b>-0,357</b>	<b>-0,280</b>	<b>-0,377</b>	-0,200	-0,077	<b>-0,243</b>
21	<b>0,575</b>	<b>0,238</b>	0,179	-0,155	<b>0,296</b>	0,098	-0,048	0,121	0,063	0,089	0,155	0,142	-0,165	0,189	<b>0,355</b>	<b>0,391</b>	0,178	<b>0,471</b>	<b>0,260</b>	<b>0,211</b>	<b>0,362</b>	0,191	<b>0,346</b>	<b>0,262</b>	<b>0,256</b>	0,192	<b>0,280</b>
22	0,204	0,078	-0,108	<b>-0,262</b>	0,134	0,027	-0,153	<b>0,333</b>	0,052	-0,117	0,060	0,132	-0,198	0,068	0,196	0,099	0,004	<b>0,288</b>	-0,040	<b>0,276</b>	0,088	-0,013	0,109	<b>0,310</b>	0,035	-0,023	<b>0,238</b>
23	<b>0,380</b>	<b>0,351</b>	<b>0,274</b>	0,018	0,194	<b>0,410</b>	-0,202	<b>0,289</b>	<b>0,367</b>	0,157	<b>0,508</b>	<b>0,261</b>	0,201	0,145	0,196	<b>0,359</b>	0,109	<b>0,330</b>	<b>0,299</b>	<b>0,257</b>	<b>0,328</b>	0,073	<b>0,279</b>	<b>0,206</b>	<b>0,260</b>	0,039	<b>0,447</b>
24	<b>0,263</b>	<b>0,226</b>	<b>0,388</b>	-0,037	<b>0,342</b>	0,026	-0,081	0,024	0,046	0,109	0,041	0,095	-0,054	<b>0,263</b>	0,194	<b>0,302</b>	0,134	<b>0,407</b>	<b>0,254</b>	0,082	0,089	-0,026	<b>0,387</b>	<b>0,250</b>	<b>0,369</b>	-0,010	0,187
25	-0,192	<b>-0,258</b>	-0,060	<b>0,688</b>	0,081	0,057	-0,173	0,000	<b>0,433</b>	-0,008	0,037	-0,125	<b>0,378</b>	<b>-0,207</b>	<b>-0,245</b>	<b>-0,262</b>	-0,043	-0,203	-0,111	0,024	-0,164	-0,169	<b>-0,225</b>	-0,153	<b>-0,220</b>	0,142	-0,153
26	-0,043	0,093	<b>0,262</b>	0,146	<b>0,305</b>	0,003	-0,136	0,014	0,034	-0,015	0,020	0,022	0,099	0,044	-0,085	0,058	0,066	0,052	0,103	-0,049	-0,027	-0,136	0,080	-0,001	0,144	-0,001	-0,011
27	<b>-0,363</b>	<b>-0,236</b>	0,094	0,014	-0,043	0,132	-0,068	0,011	0,123	-0,165	0,147	-0,012	<b>0,320</b>	-0,088	<b>-0,443</b>	-0,179	0,077	<b>-0,270</b>	0,060	-0,204	0,028	<b>-0,222</b>	-0,183	<b>-0,362</b>	-0,116	-0,043	-0,203
28	0,059	<b>0,431</b>	<b>0,346</b>	0,066	<b>0,289</b>	0,014	-0,164	0,043	0,124	0,194	0,037	<b>0,342</b>	-0,087	<b>0,352</b>	<b>0,294</b>	<b>0,207</b>	0,126	0,124	0,200	-0,050	0,000	-0,068	<b>0,418</b>	<b>0,384</b>	<b>0,349</b>	0,044	0,115
29	-0,010	-0,097	0,065	<b>0,635</b>	<b>0,235</b>	-0,009	-0,034	-0,015	<b>0,481</b>	<b>0,221</b>	0,068	0,026	<b>0,226</b>	-0,169	-0,008	-0,097	-0,115	-0,195	0,006	0,186	-0,078	0,136	-0,077	-0,026	-0,054	-0,038	-0,054
30	<b>0,290</b>	<b>0,328</b>	<b>0,333</b>	0,181	<b>0,253</b>	-0,065	-0,200	-0,004	0,165	<b>0,285</b>	0,086	<b>0,224</b>	-0,065	<b>0,347</b>	<b>0,369</b>	<b>0,226</b>	<b>0,233</b>	<b>0,241</b>	<b>0,303</b>	0,055	0,081	-0,059	<b>0,521</b>	<b>0,267</b>	<b>0,318</b>	0,050	0,044
31	<b>0,419</b>	<b>0,215</b>	0,050	0,176	<b>0,367</b>	0,010	<b>-0,294</b>	0,103	0,143	0,139	0,043	0,134	0,148	-0,040	<b>0,316</b>	0,122	-0,086	<b>0,218</b>	0,082	<b>0,360</b>	0,138	0,185	0,105	0,168	0,097	0,097	0,105
32	0,086	0,186	-0,080	<b>0,502</b>	<b>0,529</b>	-0,037	-0,037	-0,042	0,203	0,005	0,026	-0,003	0,100	-0,024	0,152	-0,112	-0,135	0,127	-0,096	<b>0,305</b>	<b>-0,256</b>	-0,016	-0,008	<b>0,530</b>	-0,121	0,062	0,126
33	<b>0,710</b>	0,177	<b>0,350</b>	-0,085	0,089	0,069	-0,190	0,203	<b>0,233</b>	0,094	<b>0,262</b>	<b>0,304</b>	-0,127	<b>0,221</b>	<b>0,339</b>	<b>0,732</b>	<b>0,393</b>	<b>0,519</b>	<b>0,479</b>	<b>0,450</b>	<b>0,627</b>	0,132	<b>0,416</b>	0,094	<b>0,491</b>	0,073	<b>0,401</b>
34	0,142	0,007	0,178	<b>0,736</b>	<b>0,214</b>	-0,008	-0,007	0,089	<b>0,541</b>	<b>0,213</b>	<b>0,209</b>	0,047	<b>0,243</b>	0,041	0,198	0,068	-0,138	-0,090	0,147	<b>0,400</b>	-0,089	0,177	0,094	<b>0,219</b>	0,064	0,027	0,169
35	<b>0,252</b>	<b>0,895</b>	<b>0,226</b>	-0,024	<b>0,265</b>	0,039	-0,064	0,082	0,061	<b>0,299</b>	-0,024	<b>0,455</b>	-0,080	<b>0,308</b>	<b>0,505</b>	<b>0,338</b>	0,056	<b>0,340</b>	<b>0,243</b>	0,104	0,109	0,009	<b>0,515</b>	<b>0,508</b>	<b>0,433</b>	<b>0,278</b>	0,197
36	<b>-0,243</b>	-0,097	-0,073	<b>0,278</b>	-0,128	0,000	<b>0,411</b>	0,064	<b>0,229</b>	0,009	0,148	-0,111	0,089	-0,001	-0,160	-0,108	-0,036	-0,113	-0,027	0,145	<b>-0,257</b>	-0,156	-0,101	0,176	-0,166	0,050	0,061
37	-0,043	-0,111	-0,013	0,196	<b>0,328</b>	-0,034	-0,095	-0,038	0,063	-0,031	-0,142	-0,011	0,150	-0,106	-0,097	-0,117	-0,065	-0,071	-0,086	0,090	-0,138	-0,100	-0,068	-0,059	-0,046	-0,034	-0,113
38	<b>-0,257</b>	-0,033	-0,039	<b>0,244</b>	0,116	0,161	-0,013	-0,035	0,023	-0,067	0,035	-0,181	<b>0,355</b>	-0,113	<b>-0,246</b>	<b>-0,270</b>	-0,146	-0,149	<b>-0,210</b>	<b>-0,237</b>	-0,123	<b>-0,218</b>	<b>-0,260</b>	-0,193	-0,194	-0,063	-0,146
39	-0,105	-0,182	0,141	<b></b>																							

Table S1 Continued.

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
45	-0.088	<b>0.319</b>	-0.067	0.110	0.115	0.086	0.170	0.146	-0.104	<b>0.447</b>	0.003	0.163	0.063	0.147	0.062	0.016	-0.168	-0.134	-0.161	<b>-0.230</b>	<b>0.263</b>	0.001	<b>0.209</b>	0.117	-0.047	-0.030	<b>-0.232</b>	0.190	0.035	<b>0.444</b>
46	-0.072	-0.015	-0.023	0.005	0.095	-0.067	<b>0.277</b>	0.123	-0.001	-0.166	-0.108	0.090	-0.174	<b>0.228</b>	-0.072	0.073	-0.010	-0.039	-0.110	-0.041	-0.155	-0.052	-0.186	-0.091	<b>0.211</b>	0.013	-0.080	<b>0.214</b>	0.191	-0.060
47	-0.099	<b>0.242</b>	0.122	0.069	<b>0.498</b>	-0.145	<b>0.371</b>	-0.044	<b>0.346</b>	-0.045	<b>0.324</b>	<b>0.364</b>	-0.028	0.063	-0.129	<b>0.333</b>	-0.105	-0.001	0.103	-0.042	-0.102	<b>-0.245</b>	0.039	-0.114	<b>0.594</b>	0.083	-0.019	-0.091	<b>0.597</b>	0.098
48	0.101	0.117	-0.049	-0.084	0.031	<b>0.208</b>	-0.101	<b>0.320</b>	-0.018	<b>0.428</b>	-0.061	0.113	<b>0.295</b>	<b>0.209</b>	<b>0.394</b>	-0.048	-0.053	-0.020	<b>0.240</b>	-0.046	0.185	<b>0.233</b>	<b>0.406</b>	<b>0.392</b>	-0.067	<b>0.218</b>	-0.137	<b>0.225</b>	0.026	<b>0.310</b>
49	-0.139	<b>0.220</b>	0.059	<b>0.222</b>	<b>0.717</b>	0.057	<b>0.663</b>	0.009	<b>0.206</b>	0.002	<b>0.434</b>	<b>0.712</b>	0.048	0.091	-0.040	<b>0.621</b>	0.014	0.138	0.083	0.048	-0.078	<b>-0.227</b>	0.177	0.004	<b>0.684</b>	0.113	0.027	0.055	<b>0.872</b>	0.187
50	0.073	-0.030	<b>-0.240</b>	0.098	0.009	0.127	-0.146	-0.026	-0.001	0.198	-0.117	0.201	<b>0.448</b>	-0.032	0.164	0.005	<b>-0.241</b>	-0.161	0.007	-0.014	<b>0.334</b>	-0.080	0.191	<b>0.504</b>	-0.115	<b>0.248</b>	0.008	<b>0.274</b>	0.080	<b>0.284</b>
51	0.107	-0.025	-0.021	0.038	0.162	0.119	<b>0.262</b>	-0.137	0.168	0.038	<b>0.227</b>	0.197	0.000	-0.001	-0.013	0.192	-0.005	0.034	-0.006	0.079	0.109	-0.155	0.029	0.005	<b>0.287</b>	0.102	0.148	-0.084	<b>0.299</b>	0.042
52	<b>0.341</b>	-0.031	<b>-0.287</b>	0.015	-0.002	<b>0.380</b>	-0.072	0.040	-0.109	<b>0.428</b>	-0.102	0.053	<b>0.312</b>	-0.096	<b>0.262</b>	-0.140	-0.160	-0.177	-0.196	<b>-0.296</b>	<b>0.858</b>	0.010	<b>0.363</b>	<b>0.435</b>	-0.168	-0.051	-0.165	-0.033	-0.086	<b>0.234</b>
53	-0.021	-0.060	-0.038	-0.087	0.025	-0.024	-0.009	0.042	-0.074	-0.008	-0.133	0.008	-0.083	0.070	-0.004	-0.039	-0.015	0.026	-0.062	-0.103	-0.091	-0.050	-0.021	-0.010	-0.081	-0.083	-0.091	0.193	0.003	-0.051
54	0.138	0.120	0.057	0.152	<b>0.225</b>	<b>0.283</b>	0.193	<b>0.223</b>	0.017	0.131	0.081	<b>0.215</b>	-0.194	<b>0.400</b>	0.181	0.197	0.166	0.174	-0.091	-0.117	0.158	0.054	0.086	<b>0.232</b>	0.161	<b>0.235</b>	-0.132	<b>0.301</b>	<b>0.311</b>	<b>0.293</b>
55	-0.065	0.129	-0.117	-0.005	<b>0.317</b>	-0.046	<b>0.253</b>	0.005	<b>0.289</b>	0.153	0.158	<b>0.377</b>	<b>0.210</b>	0.128	-0.076	<b>0.281</b>	-0.166	-0.043	0.148	0.044	-0.003	-0.137	<b>0.214</b>	-0.031	<b>0.618</b>	0.074	0.088	0.024	<b>0.531</b>	0.062
56	-0.138	0.078	<b>0.568</b>	-0.006	0.193	-0.008	0.091	<b>0.253</b>	-0.055	-0.107	<b>0.312</b>	0.032	<b>-0.241</b>	<b>0.233</b>	-0.008	0.115	<b>0.305</b>	<b>0.272</b>	0.116	0.094	<b>-0.301</b>	-0.075	-0.123	-0.083	0.177	0.013	-0.015	0.064	0.061	-0.036
57	-0.010	0.166	-0.017	-0.073	-0.095	0.129	-0.144	<b>0.415</b>	-0.143	<b>0.280</b>	<b>-0.255</b>	0.106	0.167	<b>0.562</b>	<b>0.272</b>	-0.156	-0.200	-0.169	-0.054	<b>-0.223</b>	0.054	0.101	<b>0.245</b>	<b>0.332</b>	-0.187	<b>0.237</b>	-0.181	<b>0.816</b>	-0.028	<b>0.501</b>
58	0.088	0.141	-0.125	0.012	0.043	0.008	<b>0.227</b>	-0.012	0.023	<b>0.283</b>	-0.043	<b>0.451</b>	0.091	0.137	0.038	0.123	<b>-0.248</b>	-0.072	0.014	-0.138	0.078	-0.031	<b>0.208</b>	-0.052	<b>0.288</b>	0.034	-0.069	0.069	<b>0.362</b>	0.129
59	0.038	<b>0.238</b>	<b>0.459</b>	-0.104	<b>0.325</b>	0.157	<b>0.292</b>	0.097	0.172	-0.079	0.192	0.032	-0.120	<b>0.250</b>	-0.001	0.185	<b>0.316</b>	<b>0.311</b>	<b>0.319</b>	<b>0.238</b>	<b>-0.209</b>	-0.088	0.044	-0.013	<b>0.251</b>	<b>0.325</b>	0.189	0.067	<b>0.286</b>	-0.007
60	0.190	0.011	<b>-0.207</b>	-0.119	0.041	0.192	-0.066	<b>0.224</b>	0.017	<b>0.543</b>	<b>-0.242</b>	0.158	<b>0.798</b>	0.034	<b>0.369</b>	-0.169	<b>-0.361</b>	<b>-0.295</b>	0.020	-0.181	<b>0.395</b>	0.152	<b>0.562</b>	<b>0.456</b>	-0.163	<b>0.242</b>	-0.128	<b>0.380</b>	-0.012	<b>0.406</b>
61	<b>0.316</b>	-0.051	<b>-0.269</b>	-0.107	0.047	<b>0.364</b>	0.148	<b>0.300</b>	-0.177	<b>0.552</b>	<b>-0.232</b>	0.135	<b>0.303</b>	-0.012	<b>0.460</b>	<b>-0.222</b>	-0.194	-0.129	<b>-0.244</b>	<b>-0.464</b>	<b>0.575</b>	0.204	<b>0.380</b>	<b>0.263</b>	-0.192	-0.043	<b>-0.363</b>	0.059	-0.010	<b>0.290</b>
62	-0.134	<b>0.372</b>	-0.064	-0.091	-0.153	0.175	-0.120	<b>0.293</b>	-0.042	<b>0.637</b>	<b>-0.238</b>	0.070	0.116	<b>0.369</b>	0.197	-0.182	-0.190	-0.172	-0.045	<b>-0.358</b>	<b>0.238</b>	0.078	<b>0.351</b>	<b>0.226</b>	<b>-0.258</b>	0.093	<b>-0.236</b>	<b>0.431</b>	-0.097	<b>0.328</b>
63	-0.051	0.030	-0.132	-0.147	0.105	0.031	0.022	0.027	0.047	0.102	-0.186	<b>0.255</b>	<b>0.577</b>	-0.073	0.119	-0.051	<b>-0.320</b>	<b>-0.275</b>	-0.002	-0.031	0.179	-0.108	<b>0.274</b>	<b>0.388</b>	-0.060	<b>0.262</b>	0.094	<b>0.346</b>	0.065	<b>0.333</b>
64	<b>-0.221</b>	<b>0.220</b>	-0.084	0.132	<b>0.420</b>	-0.041	<b>0.447</b>	-0.029	<b>0.239</b>	-0.004	<b>0.264</b>	<b>0.464</b>	-0.027	0.159	-0.134	<b>0.477</b>	-0.094	0.042	0.086	0.032	-0.155	<b>-0.262</b>	0.018	-0.037	<b>0.688</b>	0.146	0.014	0.066	<b>0.635</b>	0.181
65	<b>0.273</b>	0.060	0.133	-0.016	<b>0.231</b>	<b>0.393</b>	0.124	<b>0.260</b>	-0.048	<b>0.226</b>	0.018	0.159	-0.006	<b>0.398</b>	<b>0.314</b>	0.082	0.059	0.032	-0.007	-0.087	<b>0.296</b>	0.134	0.194	<b>0.342</b>	0.081	<b>0.305</b>	-0.043	<b>0.289</b>	<b>0.235</b>	<b>0.253</b>
66	-0.001	-0.058	0.037	-0.075	0.054	-0.028	-0.175	0.100	-0.037	0.151	0.034	0.011	<b>0.266</b>	0.166	0.006	0.050	0.071	0.004	-0.037	0.095	0.098	0.027	<b>0.410</b>	0.026	0.057	0.003	0.132	0.014	-0.009	-0.065
67	0.055	-0.050	<b>-0.237</b>	<b>0.207</b>	-0.071	-0.088	<b>-0.296</b>	-0.196	<b>0.218</b>	-0.128	0.031	-0.048	-0.167	-0.112	<b>-0.266</b>	0.071	-0.112	-0.106	-0.065	-0.048	-0.048	-0.153	-0.202	-0.081	-0.173	-0.136	-0.068	-0.164	-0.034	-0.200
68	-0.006	-0.072	0.176	-0.133	0.094	0.044	<b>-0.232</b>	0.155	-0.087	<b>0.235</b>	0.200	-0.016	<b>0.244</b>	0.153	0.153	-0.014	-0.021	0.023	0.024	-0.008	0.121	<b>0.333</b>	<b>0.289</b>	0.024	0.000	0.014	0.011	0.043	-0.015	-0.004
69	-0.028	0.003	0.001	-0.055	<b>0.351</b>	-0.012	<b>0.291</b>	0.144	0.074	0.178	0.189	<b>0.471</b>	<b>0.416</b>	<b>0.206</b>	0.094	<b>0.274</b>	<b>-0.309</b>	<b>-0.242</b>	0.179	0.077	0.063	0.052	<b>0.367</b>	0.046	<b>0.433</b>	0.034	0.123	0.124	<b>0.481</b>	0.165
70	-0.070	<b>0.458</b>	-0.086	0.100	0.192	0.018	0.082	0.008	0.029	<b>0.274</b>	-0.047	0.155	0.070	-0.011	-0.006	0.054	-0.102	-0.020	-0.074	-0.147	0.089	-0.117	0.157	0.109	-0.008	-0.015	-0.165	0.194	<b>0.221</b>	<b>0.285</b>
71	0.118	0.027	-0.084	-0.193	0.086	0.005	-0.003	0.000	-0.114	0.135	-0.062	<b>0.235</b>	<b>0.420</b>	-0.038	-0.005	-0.077	<b>-0.240</b>	<b>-0.228</b>	-0.075	-0.047	0.155	0.060	<b>0.508</b>	0.041	0.037	0.020	-0.147	0.037	0.068	0.086
72	0.082	0.082	-0.151	<b>-0.269</b>	-0.130	0.102	0.032	0.095	-0.114	<b>0.314</b>	<b>-0.237</b>	0.106	<b>0.283</b>	0.123	0.070	-0.199	<b>-0.354</b>	<b>-0.278</b>	-0.016	-0.179	0.142	0.132	<b>0.261</b>	0.095	-0.125	0.022	-0.012	<b>0.342</b>	0.026	<b>0.224</b>
73	-0.184	0.033	0.152	-0.022	<b>0.249</b>	-0.069	<b>0.227</b>	-0.065	-0.012	-0.052	<b>0.233</b>	0.071	0.102	0.012	<b>-0.258</b>	0.128	0.176	0.112	0.102	<b>0.239</b>	-0.165	-0.198	0.201	-0.054	<b>0.378</b>	0.099	<b>0.320</b>	-0.087	<b>0.226</b>	-0.065
74	-0.100	0.041	-0.121	0.026	0.032	0.008	-0.091	<b>0.208</b>	0.103	<b>0.261</b>	-0.028	0.039	<b>0.305</b>	0.067	0.129	-0.020	<b>-0.271</b>	<b>-0.239</b>	-0.119	-0.175	0.189	0.068	0.145	<b>0.263</b>	<b>-0.207</b>	0.044	-0.088	<b>0.352</b>	-0.169	<b>0.347</b>
75	<b>0.230</b>	0.080	-0.203	-0.085	-0.016	<b>0.207</b>	0.064	0.202	-0.130	<b>0.439</b>	<b>-0.249</b>	0.188	0.063	0.174	<b>0.236</b>	-0.203	<b>-0.249</b>	-0.128	<b>-0.341</b>	<b>-0.524</b>	<b>0.355</b>	0.196	0.196	0.194	<b>-0.245</b>	-0.085	<b>-0.443</b>	<b>0.294</b>	-0.008	<b>0.369</b>
76	0.093	-0.062	<b>-0.305</b>	<b>-0.263</b>	-0.039	0.110	-0.019	0.158	-0.034	<b>0.419</b>	<b>-0.366</b>	0.058	<b>0.616</b>	-0.115	<b>0.255</b>	<b>-0.307</b>	<b>-0.409</b>	<b>-0.324</b>	-0.120	<b>-0.290</b>	<b>0.391</b>	0.099	<b>0.359</b>	<b>0.302</b>	<b>-0.262</b>	0.058	-0.179	<b>0.207</b>	-0.097	<b>0.226</b>
77	-0.021	-0.008	0.103	-0.062	-0.063	0.032	-0.023	<b>0.247</b>	-0.067	0.166	-0.197	-0.133	<b>0.417</b>	0.097	<b>0.437</b>	-0.124	-0.143	-0.126	0.067	-0.018	0.178	0.004	0.109	0.134	-0.043	0.066	0.077	0.126	-0.115	<b>0.233</b>
78	<b>0.455</b>	-0.043	<b>-0.263</b>	-0.117	-0.127	<b>0.257</b>	-0.138	<b>0.320</b>	-0.068	<b>0.542</b>	<b>-0.328</b>	-0.103	<b>0.380</b>	0.203	<b>0.465</b>	<b>-0.354</b>	<b>-0.245</b>	<b>-0.258</b>	-0.117	<b>-0.317</b>	<b>0.471</b>	<b>0.288</b>	<b>0.330</b>	<b>0.407</b>	-0.203	0.052	<b>-0.270</b>	0.124	-0.195	<b>0.241</b>
79	0.043	0.061	-0.173	-0.189	0.046	0.051	0.044	-0.011	0.029	<b>0.258</b>	<b>-0.225</b>	0.194	<b>0.558</b>	-0.166	0.058	-0.164	<b>-0.408</b>	<b>-0.333</b>												

Table S1 Continued.

Code	31	32	33	34	35	36	37	38	39	40	41	42	43	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
45	0.114	0.133	<b>0.227</b>	0.198	<b>0.390</b>	0.015	-0.051	-0.105	-0.090	0.066	-0.105	0.098	0.111	1	0.179	0.114	0.015	<b>0.212</b>	0.032	-0.073	0.160	-0.076	<b>0.216</b>	-0.035	-0.040	<b>0.256</b>	<b>0.216</b>	-0.078	<b>0.287</b>
46	0.081	0.146	-0.124	<b>0.264</b>	-0.019	0.097	0.030	0.105	0.170	0.061	0.114	-0.041	0.040	0.179	1	0.193	-0.048	<b>0.289</b>	-0.003	-0.117	-0.187	0.012	<b>0.249</b>	<b>0.285</b>	0.083	0.182	<b>0.261</b>	0.170	-0.085
47	0.166	<b>0.454</b>	-0.065	<b>0.727</b>	-0.135	<b>0.328</b>	0.064	0.102	<b>0.588</b>	0.045	0.000	-0.099	-0.075	0.114	0.193	1	0.027	<b>0.672</b>	0.060	0.158	-0.076	-0.126	<b>0.243</b>	<b>0.612</b>	0.031	-0.111	<b>0.376</b>	<b>0.205</b>	-0.044
48	<b>0.290</b>	<b>0.296</b>	<b>0.326</b>	0.159	<b>0.299</b>	0.047	0.038	0.048	0.088	0.145	-0.024	<b>0.494</b>	<b>0.351</b>	0.015	-0.048	0.027	1	0.111	<b>0.256</b>	-0.016	0.156	0.132	<b>0.251</b>	0.123	0.067	<b>0.271</b>	0.115	0.147	<b>0.287</b>
49	<b>0.335</b>	<b>0.461</b>	0.018	<b>0.868</b>	-0.066	0.069	<b>0.313</b>	<b>0.233</b>	<b>0.673</b>	0.203	0.122	0.013	0.045	<b>0.212</b>	<b>0.289</b>	<b>0.672</b>	0.111	1	0.032	<b>0.242</b>	-0.061	-0.030	<b>0.358</b>	<b>0.617</b>	0.087	0.002	<b>0.511</b>	<b>0.256</b>	0.051
50	0.089	0.047	<b>0.352</b>	0.120	<b>0.346</b>	0.053	0.010	-0.053	0.073	<b>0.303</b>	<b>-0.244</b>	<b>0.410</b>	<b>0.372</b>	0.032	-0.003	0.060	<b>0.256</b>	0.032	1	0.128	<b>0.469</b>	0.072	-0.101	<b>0.292</b>	<b>-0.251</b>	<b>0.275</b>	0.190	<b>-0.220</b>	<b>0.571</b>
51	<b>0.294</b>	<b>0.257</b>	0.011	<b>0.226</b>	0.094	0.069	0.153	0.143	<b>0.238</b>	0.124	0.035	0.057	-0.005	-0.073	-0.117	0.158	-0.016	<b>0.242</b>	0.128	1	0.142	-0.153	0.190	<b>0.246</b>	-0.171	-0.034	<b>0.237</b>	0.173	0.037
52	0.107	0.154	<b>0.499</b>	-0.062	<b>0.271</b>	-0.140	-0.051	-0.182	-0.091	0.025	<b>-0.255</b>	<b>0.388</b>	0.186	0.160	-0.187	-0.076	0.156	-0.061	<b>0.469</b>	0.142	1	-0.088	0.107	0.005	<b>-0.248</b>	-0.003	0.043	-0.164	<b>0.370</b>
53	0.126	-0.042	-0.049	-0.104	<b>0.247</b>	<b>-0.222</b>	-0.052	-0.103	-0.078	0.005	-0.054	-0.037	0.183	-0.076	0.012	-0.126	0.132	-0.030	0.072	-0.153	-0.088	1	0.042	-0.119	-0.009	<b>0.353</b>	-0.045	-0.072	0.037
54	<b>0.323</b>	<b>0.677</b>	-0.077	<b>0.322</b>	<b>0.260</b>	-0.004	<b>0.288</b>	<b>0.217</b>	-0.004	0.167	<b>0.244</b>	<b>0.277</b>	<b>0.257</b>	<b>0.216</b>	<b>0.249</b>	<b>0.243</b>	<b>0.251</b>	<b>0.358</b>	-0.101	0.190	0.107	0.042	1	0.118	0.143	<b>0.324</b>	<b>0.268</b>	<b>0.368</b>	-0.084
55	<b>0.239</b>	<b>0.377</b>	0.081	<b>0.635</b>	0.051	<b>0.344</b>	0.036	0.167	<b>0.817</b>	0.124	0.027	0.021	-0.021	-0.035	<b>0.285</b>	<b>0.612</b>	0.123	<b>0.617</b>	<b>0.292</b>	<b>0.246</b>	0.005	-0.119	0.118	1	0.006	0.013	<b>0.640</b>	0.142	<b>0.216</b>
56	0.067	-0.025	<b>-0.244</b>	0.152	-0.036	-0.110	0.151	0.123	0.084	0.146	<b>0.304</b>	-0.052	0.002	-0.040	0.083	0.031	0.067	0.087	<b>-0.251</b>	-0.171	<b>-0.248</b>	-0.009	0.143	0.006	1	0.036	-0.116	<b>0.376</b>	<b>-0.235</b>
57	0.127	0.079	0.097	0.071	<b>0.657</b>	-0.117	-0.045	0.051	-0.163	<b>0.322</b>	-0.012	<b>0.369</b>	<b>0.590</b>	<b>0.256</b>	0.182	-0.111	<b>0.271</b>	0.002	<b>0.275</b>	-0.034	-0.003	<b>0.353</b>	<b>0.324</b>	0.013	0.036	1	0.169	0.187	<b>0.373</b>
58	<b>0.238</b>	<b>0.405</b>	0.142	<b>0.454</b>	<b>0.262</b>	0.159	-0.061	0.016	<b>0.339</b>	0.159	-0.006	0.058	0.121	<b>0.216</b>	<b>0.261</b>	<b>0.376</b>	0.115	<b>0.511</b>	0.190	<b>0.237</b>	0.043	-0.045	<b>0.268</b>	<b>0.640</b>	-0.116	0.169	1	0.042	<b>0.225</b>
59	<b>0.255</b>	<b>0.235</b>	-0.149	<b>0.333</b>	0.007	0.016	<b>0.401</b>	<b>0.460</b>	0.190	<b>0.315</b>	<b>0.449</b>	-0.034	0.062	-0.078	0.170	<b>0.205</b>	0.147	<b>0.256</b>	<b>-0.220</b>	0.173	-0.164	-0.072	<b>0.368</b>	0.142	<b>0.376</b>	0.187	0.042	1	-0.151
60	0.138	-0.072	<b>0.814</b>	0.115	<b>0.463</b>	-0.144	-0.005	-0.128	0.103	<b>0.369</b>	<b>-0.354</b>	<b>0.532</b>	<b>0.529</b>	<b>0.287</b>	-0.085	-0.044	<b>0.287</b>	0.051	<b>0.571</b>	0.037	<b>0.370</b>	0.037	-0.084	<b>0.216</b>	<b>-0.235</b>	<b>0.373</b>	<b>0.225</b>	-0.151	1
61	<b>0.419</b>	0.086	<b>0.710</b>	0.142	<b>0.252</b>	<b>-0.243</b>	-0.043	<b>-0.257</b>	-0.105	0.107	<b>-0.286</b>	<b>0.395</b>	<b>0.301</b>	<b>0.325</b>	-0.026	-0.050	<b>0.330</b>	0.135	0.183	0.052	<b>0.465</b>	0.001	0.153	0.010	-0.161	0.158	<b>0.276</b>	-0.096	<b>0.525</b>
62	<b>0.215</b>	0.186	0.177	0.007	<b>0.895</b>	-0.097	-0.111	-0.033	-0.182	<b>0.258</b>	-0.023	<b>0.287</b>	<b>0.394</b>	<b>0.362</b>	-0.010	-0.097	<b>0.296</b>	-0.069	<b>0.260</b>	0.132	<b>0.219</b>	<b>0.326</b>	<b>0.266</b>	0.047	-0.014	<b>0.690</b>	<b>0.315</b>	0.107	<b>0.382</b>
63	0.050	-0.080	<b>0.350</b>	0.178	<b>0.226</b>	-0.073	-0.013	-0.039	0.141	<b>0.377</b>	<b>-0.320</b>	<b>0.290</b>	<b>0.352</b>	-0.019	-0.010	0.033	0.073	0.100	<b>0.616</b>	0.191	0.190	0.024	-0.138	<b>0.214</b>	<b>-0.262</b>	<b>0.412</b>	<b>0.211</b>	-0.068	<b>0.589</b>
64	0.176	<b>0.502</b>	-0.085	<b>0.736</b>	-0.024	<b>0.278</b>	0.196	<b>0.244</b>	<b>0.660</b>	0.157	0.128	-0.044	-0.045	0.178	<b>0.409</b>	<b>0.700</b>	0.037	<b>0.790</b>	0.131	<b>0.266</b>	-0.134	-0.152	<b>0.315</b>	<b>0.807</b>	0.043	0.012	<b>0.627</b>	<b>0.216</b>	0.009
65	<b>0.367</b>	<b>0.529</b>	0.089	<b>0.214</b>	<b>0.265</b>	-0.128	<b>0.328</b>	0.116	0.090	0.162	0.157	<b>0.448</b>	<b>0.407</b>	0.107	0.163	<b>0.243</b>	<b>0.326</b>	<b>0.252</b>	-0.026	0.121	<b>0.233</b>	0.106	<b>0.767</b>	0.091	0.086	<b>0.277</b>	0.176	<b>0.312</b>	0.054
66	0.010	-0.037	0.069	-0.008	0.039	0.000	-0.034	0.161	<b>0.208</b>	0.008	0.075	0.082	-0.018	-0.052	-0.101	0.073	0.134	0.022	0.007	-0.005	0.093	-0.035	-0.008	0.143	0.112	0.029	0.018	0.046	0.128
67	<b>-0.294</b>	-0.037	-0.190	-0.007	-0.064	<b>0.411</b>	-0.095	-0.013	-0.027	<b>-0.206</b>	-0.103	-0.150	<b>-0.221</b>	-0.133	0.030	0.103	-0.096	-0.062	<b>0.234</b>	-0.039	0.070	-0.055	-0.056	0.137	-0.042	-0.179	-0.058	-0.105	-0.134
68	0.103	-0.042	0.203	0.089	0.082	0.064	-0.038	-0.035	<b>0.214</b>	0.026	0.061	0.166	0.096	0.014	-0.179	0.064	<b>0.277</b>	0.021	-0.051	-0.084	0.063	-0.054	0.028	0.141	<b>0.358</b>	-0.028	-0.030	0.062	<b>0.214</b>
69	0.143	0.203	<b>0.233</b>	<b>0.541</b>	0.061	<b>0.229</b>	0.063	0.023	<b>0.777</b>	0.061	-0.093	0.108	0.124	0.120	0.135	<b>0.477</b>	0.202	<b>0.597</b>	0.142	0.117	0.019	-0.070	-0.013	<b>0.680</b>	-0.008	0.094	<b>0.417</b>	0.144	<b>0.336</b>
70	0.139	0.005	0.094	<b>0.213</b>	<b>0.299</b>	0.009	-0.031	-0.067	0.005	0.050	-0.163	0.036	0.143	<b>0.628</b>	0.001	0.118	-0.069	<b>0.215</b>	<b>0.239</b>	-0.057	0.044	0.120	0.044	0.067	-0.090	<b>0.265</b>	0.098	-0.095	<b>0.309</b>
71	0.043	0.026	<b>0.262</b>	<b>0.209</b>	-0.024	0.148	-0.142	0.035	<b>0.247</b>	0.041	-0.191	0.052	0.022	-0.048	-0.084	0.177	0.138	0.193	0.171	0.138	0.150	-0.183	0.017	<b>0.307</b>	-0.112	0.194	<b>0.357</b>	0.095	<b>0.270</b>
72	0.134	-0.003	<b>0.304</b>	0.047	<b>0.455</b>	-0.111	-0.011	-0.181	0.072	0.187	-0.194	0.195	<b>0.321</b>	0.070	0.025	-0.017	<b>0.216</b>	0.043	<b>0.324</b>	0.102	0.102	<b>0.457</b>	0.005	0.177	-0.161	<b>0.565</b>	<b>0.242</b>	0.022	<b>0.520</b>
73	0.148	0.100	-0.127	<b>0.243</b>	-0.080	0.089	0.150	<b>0.355</b>	<b>0.352</b>	0.192	<b>0.280</b>	-0.131	<b>-0.241</b>	0.002	0.089	<b>0.268</b>	0.017	<b>0.269</b>	-0.055	<b>0.209</b>	-0.095	-0.116	0.098	<b>0.305</b>	0.121	-0.014	0.191	<b>0.220</b>	-0.088
74	-0.040	-0.024	<b>0.221</b>	0.041	<b>0.308</b>	-0.001	-0.106	-0.113	-0.056	0.182	<b>-0.225</b>	<b>0.237</b>	<b>0.271</b>	<b>0.266</b>	-0.065	-0.114	0.019	-0.009	<b>0.241</b>	-0.045	0.142	-0.046	-0.063	-0.026	-0.111	<b>0.320</b>	0.076	-0.039	<b>0.375</b>
75	<b>0.316</b>	0.152	<b>0.339</b>	0.198	<b>0.505</b>	-0.160	-0.097	<b>-0.246</b>	-0.194	0.134	<b>-0.248</b>	<b>0.260</b>	<b>0.381</b>	<b>0.449</b>	0.052	0.033	0.199	0.160	<b>0.221</b>	0.059	<b>0.272</b>	0.178	<b>0.296</b>	0.004	-0.055	<b>0.442</b>	<b>0.377</b>	-0.089	<b>0.424</b>
76	0.122	-0.112	<b>0.732</b>	0.068	<b>0.338</b>	-0.108	-0.117	<b>-0.270</b>	0.026	<b>0.255</b>	<b>-0.450</b>	<b>0.339</b>	<b>0.357</b>	0.154	-0.040	-0.067	<b>0.288</b>	-0.012	<b>0.597</b>	0.105	<b>0.383</b>	0.173	-0.135	0.156	<b>-0.305</b>	<b>0.345</b>	0.202	-0.178	<b>0.829</b>
77	-0.086	-0.135	<b>0.393</b>	-0.138	0.056	-0.036	-0.065	-0.146	-0.067	0.190	-0.047	0.177	0.129	0.057	-0.118	-0.121	-0.027	-0.138	0.036	-0.119	0.155	0.023	-0.117	-0.062	-0.019	0.048	-0.087	-0.084	<b>0.225</b>
78	<b>0.218</b>	0.127	<b>0.519</b>	-0.090	<b>0.340</b>	-0.113	-0.071	-0.149	-0.038	0.054	<b>-0.248</b>	<b>0.618</b>	<b>0.355</b>	0.106	-0.065	-0.084	<b>0.477</b>	-0.145	<b>0.345</b>	-0.011	<b>0.419</b>	0.005	0.056	0.046	<b>-0.227</b>	0.175	0.115	-0.149	<b>0.539</b>
79	0.082	-0.096	<b>0.479</b>	0.147	<b>0.243</b>	-0.027	-0.086	<b>-0.210</b>	0.090	<b>0.284</b>	<b>-0.422</b>	<b>0.227</b>	<b>0.230</b>	0.139	-0.064	0.044	0.052	0.079	<b>0.525</b>	0.204	<b>0.243</b>	0.001	-0.161	0.197	<b>-0.271</b>	<b>0.324</b>	<b>0.308</b>	-0.138	<b>0.661</b>
80	<b>0.360</b>	<b>0.305</b>	<b>0.450</b>	<b>0.400</b>	0.104	0.145	0.090	<b>-0.237</b>	<b>0.257</b>	-0.017	<b>-0.283</b>	<b>0.265</b>	0.152	<b>0.231</b>	0.095	<b>0.</b>													

Table S1 Continued.

Code	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
45	<b>0,325</b>	<b>0,362</b>	-0,019	0,178	0,107	-0,052	-0,133	0,014	0,120	<b>0,628</b>	-0,048	0,070	0,002	<b>0,266</b>	<b>0,449</b>	0,154	0,057	0,106	0,139	<b>0,231</b>	0,109	0,081	<b>0,423</b>	<b>0,250</b>	0,149	-0,032	0,114
46	-0,026	-0,010	-0,010	<b>0,409</b>	0,163	-0,101	0,030	-0,179	0,135	0,001	-0,084	0,025	0,089	-0,065	0,052	-0,040	-0,118	-0,065	-0,064	0,095	-0,035	0,146	-0,059	0,081	-0,003	-0,049	0,004
47	-0,050	-0,097	0,033	<b>0,700</b>	<b>0,243</b>	0,073	0,103	0,064	<b>0,477</b>	0,118	0,177	-0,017	<b>0,268</b>	-0,114	0,033	-0,067	-0,121	-0,084	0,044	<b>0,324</b>	-0,113	0,047	-0,052	0,203	-0,071	0,016	0,120
48	<b>0,330</b>	<b>0,296</b>	0,073	0,037	<b>0,326</b>	0,134	-0,096	<b>0,277</b>	0,202	-0,069	0,138	<b>0,216</b>	0,017	0,019	0,199	<b>0,288</b>	-0,027	<b>0,477</b>	0,052	<b>0,367</b>	<b>0,254</b>	0,025	<b>0,219</b>	<b>0,332</b>	0,184	-0,095	<b>0,404</b>
49	0,135	-0,069	0,100	<b>0,790</b>	<b>0,252</b>	0,022	-0,062	0,021	<b>0,597</b>	<b>0,215</b>	0,193	0,043	<b>0,269</b>	-0,009	0,160	-0,012	-0,138	-0,145	0,079	<b>0,307</b>	-0,033	0,173	0,028	0,102	-0,024	-0,088	0,084
50	0,183	<b>0,260</b>	<b>0,616</b>	0,131	-0,026	0,007	<b>0,234</b>	-0,051	0,142	<b>0,239</b>	0,171	<b>0,324</b>	-0,055	<b>0,241</b>	<b>0,221</b>	<b>0,597</b>	0,036	<b>0,345</b>	<b>0,525</b>	0,156	0,145	0,147	<b>0,488</b>	0,107	<b>0,658</b>	0,142	<b>0,274</b>
51	0,052	0,132	0,191	<b>0,266</b>	0,121	-0,005	-0,039	-0,084	0,117	-0,057	0,138	0,102	<b>0,209</b>	-0,045	0,059	0,105	-0,119	-0,011	0,204	0,202	-0,071	0,115	0,024	-0,005	0,105	<b>0,269</b>	-0,034
52	<b>0,465</b>	<b>0,219</b>	0,190	-0,134	<b>0,233</b>	0,093	0,070	0,063	0,019	0,044	0,150	0,102	-0,095	0,142	<b>0,272</b>	<b>0,383</b>	0,155	<b>0,419</b>	<b>0,243</b>	0,190	<b>0,267</b>	<b>0,247</b>	<b>0,296</b>	0,204	<b>0,244</b>	0,166	<b>0,274</b>
53	0,001	<b>0,326</b>	0,024	-0,152	0,106	-0,035	-0,055	-0,054	-0,070	0,120	-0,183	<b>0,457</b>	-0,116	-0,046	0,178	0,173	0,023	0,005	0,001	-0,045	0,199	0,147	<b>0,372</b>	0,119	<b>0,265</b>	-0,023	-0,038
54	0,153	<b>0,266</b>	-0,138	<b>0,315</b>	<b>0,767</b>	-0,008	-0,056	0,028	-0,013	0,044	0,017	0,005	0,098	-0,063	<b>0,296</b>	-0,135	-0,117	0,056	-0,161	<b>0,230</b>	-0,154	0,172	0,019	<b>0,565</b>	-0,125	-0,030	0,151
55	0,010	0,047	<b>0,214</b>	<b>0,807</b>	0,091	0,143	0,137	0,141	<b>0,680</b>	0,067	<b>0,307</b>	0,177	<b>0,305</b>	-0,026	0,004	0,156	-0,062	0,046	0,197	<b>0,313</b>	-0,028	0,033	0,050	0,135	0,147	<b>0,273</b>	<b>0,217</b>
56	-0,161	-0,014	-0,262	0,043	0,086	0,112	-0,042	<b>0,358</b>	-0,008	-0,090	-0,112	-0,161	0,121	-0,111	-0,055	-0,305	-0,019	-0,227	-0,271	-0,142	-0,115	-0,165	-0,214	0,019	-0,261	-0,093	-0,041
57	0,158	<b>0,690</b>	<b>0,412</b>	0,012	<b>0,277</b>	0,029	-0,179	-0,028	0,094	<b>0,265</b>	0,194	<b>0,565</b>	-0,014	<b>0,320</b>	<b>0,442</b>	<b>0,345</b>	0,048	0,175	<b>0,324</b>	0,076	0,085	0,165	<b>0,560</b>	<b>0,404</b>	<b>0,475</b>	-0,046	0,200
58	<b>0,276</b>	<b>0,315</b>	<b>0,211</b>	<b>0,627</b>	0,176	0,018	-0,058	-0,030	<b>0,417</b>	0,098	<b>0,357</b>	<b>0,242</b>	0,191	0,076	<b>0,377</b>	0,202	-0,087	0,115	<b>0,308</b>	<b>0,376</b>	0,025	<b>0,325</b>	0,183	<b>0,235</b>	0,181	0,153	<b>0,270</b>
59	-0,096	0,107	-0,068	<b>0,216</b>	<b>0,312</b>	0,046	-0,105	0,062	0,144	-0,095	0,095	0,022	<b>0,220</b>	-0,039	-0,089	-0,178	-0,084	-0,149	-0,138	0,106	-0,144	-0,070	-0,148	0,097	-0,169	-0,056	-0,050
60	<b>0,525</b>	<b>0,382</b>	<b>0,589</b>	0,009	0,054	0,128	-0,134	<b>0,214</b>	<b>0,336</b>	<b>0,309</b>	<b>0,270</b>	<b>0,520</b>	-0,088	<b>0,375</b>	<b>0,424</b>	<b>0,829</b>	<b>0,225</b>	<b>0,539</b>	<b>0,661</b>	<b>0,409</b>	<b>0,485</b>	0,099	<b>0,678</b>	<b>0,266</b>	<b>0,802</b>	<b>0,239</b>	<b>0,405</b>
61	1	<b>0,303</b>	0,198	-0,022	<b>0,227</b>	-0,018	-0,205	0,096	0,088	0,124	<b>0,205</b>	<b>0,285</b>	-0,177	<b>0,234</b>	<b>0,765</b>	<b>0,597</b>	0,109	<b>0,470</b>	<b>0,331</b>	<b>0,486</b>	<b>0,475</b>	<b>0,393</b>	<b>0,411</b>	<b>0,232</b>	<b>0,366</b>	-0,019	<b>0,402</b>
62	<b>0,303</b>	1	<b>0,263</b>	-0,030	<b>0,217</b>	0,038	-0,054	0,016	0,024	<b>0,276</b>	0,122	<b>0,566</b>	0,021	<b>0,448</b>	<b>0,565</b>	<b>0,400</b>	0,026	<b>0,277</b>	<b>0,334</b>	0,179	0,175	0,202	<b>0,554</b>	<b>0,448</b>	<b>0,472</b>	0,179	0,203
63	0,198	<b>0,263</b>	1	0,089	-0,045	0,064	-0,125	-0,131	<b>0,232</b>	0,180	<b>0,538</b>	<b>0,413</b>	0,123	<b>0,447</b>	<b>0,257</b>	<b>0,687</b>	0,113	0,150	<b>0,872</b>	0,155	<b>0,232</b>	<b>0,306</b>	<b>0,556</b>	0,028	<b>0,794</b>	0,077	<b>0,246</b>
64	-0,022	-0,030	0,089	1	0,154	-0,038	0,108	-0,114	<b>0,518</b>	0,182	0,141	0,063	<b>0,282</b>	-0,002	0,075	-0,039	-0,116	-0,112	0,062	<b>0,273</b>	-0,203	0,045	-0,020	0,128	-0,025	0,037	0,039
65	<b>0,227</b>	<b>0,217</b>	-0,045	0,154	1	0,083	-0,144	0,141	0,130	-0,038	0,064	0,131	0,015	-0,069	<b>0,230</b>	-0,031	-0,103	<b>0,228</b>	-0,074	<b>0,340</b>	0,032	0,176	0,059	<b>0,531</b>	-0,035	0,023	<b>0,261</b>
66	-0,018	0,038	0,064	-0,038	0,083	1	-0,043	<b>0,486</b>	<b>0,237</b>	-0,049	<b>0,395</b>	0,043	<b>0,423</b>	0,112	-0,036	0,059	-0,037	0,062	0,021	-0,060	0,074	-0,062	-0,037	0,111	0,021	0,038	<b>0,460</b>
67	-0,205	-0,054	-0,125	0,108	-0,144	-0,043	1	-0,082	-0,107	-0,032	-0,074	-0,131	-0,134	-0,056	-0,113	-0,109	-0,132	-0,053	-0,094	-0,109	-0,172	-0,018	-0,076	0,082	-0,079	0,073	-0,026
68	0,096	0,016	-0,131	-0,114	0,141	<b>0,486</b>	-0,082	1	<b>0,288</b>	-0,094	0,202	-0,008	0,119	-0,043	0,024	0,049	0,090	0,093	-0,010	0,127	<b>0,250</b>	-0,154	0,027	0,176	-0,013	-0,013	<b>0,352</b>
69	0,088	0,024	<b>0,232</b>	<b>0,518</b>	0,130	<b>0,237</b>	-0,107	<b>0,288</b>	1	0,060	<b>0,376</b>	<b>0,239</b>	<b>0,265</b>	0,125	0,044	<b>0,210</b>	-0,003	0,118	<b>0,217</b>	<b>0,433</b>	0,154	-0,084	0,141	0,127	0,172	0,083	<b>0,313</b>
70	0,124	<b>0,276</b>	0,180	0,182	-0,038	-0,049	-0,032	-0,094	0,060	1	-0,061	0,165	-0,065	0,140	<b>0,296</b>	<b>0,210</b>	0,030	0,061	0,203	0,053	0,051	0,139	<b>0,418</b>	0,149	<b>0,289</b>	-0,015	0,006
71	<b>0,205</b>	0,122	<b>0,538</b>	0,141	0,064	<b>0,395</b>	-0,074	0,202	<b>0,376</b>	-0,061	1	0,204	<b>0,420</b>	0,192	0,144	<b>0,272</b>	-0,060	0,079	<b>0,574</b>	<b>0,285</b>	0,195	<b>0,296</b>	0,188	0,063	<b>0,240</b>	-0,064	<b>0,440</b>
72	<b>0,285</b>	<b>0,566</b>	<b>0,413</b>	0,063	0,131	0,043	-0,131	-0,008	<b>0,239</b>	0,165	0,204	1	0,009	0,188	<b>0,425</b>	<b>0,585</b>	0,063	<b>0,270</b>	<b>0,484</b>	<b>0,298</b>	<b>0,341</b>	<b>0,218</b>	<b>0,625</b>	<b>0,284</b>	<b>0,651</b>	0,196	0,189
73	-0,177	0,021	0,123	<b>0,282</b>	0,015	<b>0,423</b>	-0,134	0,119	<b>0,265</b>	-0,065	<b>0,420</b>	0,009	1	-0,013	-0,165	-0,043	-0,092	-0,178	0,142	0,119	-0,001	0,113	-0,080	-0,149	-0,064	-0,066	0,187
74	<b>0,234</b>	<b>0,248</b>	<b>0,447</b>	-0,002	-0,069	0,112	-0,056	-0,043	0,125	0,140	0,192	0,188	-0,013	1	<b>0,293</b>	<b>0,376</b>	-0,009	0,067	<b>0,441</b>	-0,009	0,089	-0,057	<b>0,462</b>	0,179	<b>0,397</b>	-0,026	0,064
75	<b>0,765</b>	<b>0,565</b>	<b>0,257</b>	0,075	<b>0,230</b>	-0,036	-0,113	0,024	0,044	<b>0,296</b>	0,144	<b>0,425</b>	-0,165	<b>0,293</b>	1	<b>0,510</b>	-0,003	<b>0,318</b>	<b>0,357</b>	<b>0,374</b>	<b>0,253</b>	<b>0,395</b>	<b>0,569</b>	<b>0,479</b>	<b>0,466</b>	0,036	<b>0,313</b>
76	<b>0,597</b>	<b>0,400</b>	<b>0,687</b>	-0,039	-0,031	0,059	-0,109	0,049	<b>0,210</b>	<b>0,210</b>	<b>0,272</b>	<b>0,585</b>	-0,043	<b>0,376</b>	<b>0,510</b>	1	0,200	<b>0,457</b>	<b>0,738</b>	<b>0,422</b>	<b>0,546</b>	<b>0,333</b>	<b>0,710</b>	0,180	<b>0,890</b>	0,134	<b>0,413</b>
77	0,109	0,026	0,113	-0,116	-0,103	-0,037	-0,132	0,090	-0,003	0,030	-0,060	0,063	-0,092	-0,009	-0,003	0,200	1	0,088	0,181	0,033	<b>0,239</b>	-0,100	0,133	-0,071	0,114	0,026	-0,016
78	<b>0,470</b>	<b>0,277</b>	0,150	-0,112	<b>0,228</b>	0,062	-0,053	0,093	0,118	0,061	0,079	<b>0,270</b>	-0,178	0,067	<b>0,318</b>	<b>0,457</b>	0,088	1	0,200	<b>0,476</b>	<b>0,260</b>	0,137	<b>0,318</b>	<b>0,367</b>	<b>0,375</b>	<b>0,233</b>	<b>0,531</b>
79	<b>0,331</b>	<b>0,334</b>	<b>0,872</b>	0,062	-0,074	0,021	-0,094	-0,010	<b>0,217</b>	0,203	<b>0,574</b>	<b>0,484</b>	0,142	<b>0,441</b>	<b>0,357</b>	<b>0,738</b>	0,181	0,200	1	<b>0,322</b>	<b>0,364</b>	<b>0,366</b>	<b>0,677</b>	0,049	<b>0,804</b>	0,095	<b>0,235</b>
80	<b>0,486</b>	0,179	0,155	<b>0,273</b>	<b>0,340</b>	-0,060	-0,109	0,127	<b>0,433</b>	0,053	<b>0,285</b>	<b>0,298</b>	0,119	-0,009	<b>0,374</b>	<b>0,422</b>	0,033	<b>0,476</b>	<b>0,322</b>	1	<b>0,279</b>	<b>0,362</b>	<b>0,289</b>	<b>0,359</b>	<b>0,276</b>	0,101	<b>0,549</b>
81	<b>0,475</b>	0,175	<b>0,232</b>	-0,203	0,032	0,074	-0,172	<b>0,250</b>	0,154	0,051	0,195	<b>0,341</b>	-0,001	0,089	<b>0,253</b>	<b>0,546</b>	<b>0,239</b>	<b>0,260</b>	<b>0,364</b>	<b>0,279</b>	1	0,184	<b>0,297</b>	-0,051	<b>0,361</b>	-0,033	0,194
82	<b>0,393</b>	0,202	<b>0,306</b>	0,045	0,176	-0,062	-0,018	-0,154	-0,084	0,139	<b>0,296</b>	<b>0,218</b>	0,113	-0,057	<b>0,395</b>	<b>0,333</b>	-0,100	0,137	<b>0,366</b>	<b>0,362</b>	0,184	1	<b>0,290</b>	0,057	<b>0,276</b>	-0,078	<b>0,420</b>
83	<b>0,411</b>	<b>0,554</b>	<b>0,556</b>	-0,020	0,059</																						

**Supplemental Table S2.** QTLs detected in the ‘232’ × ‘1392’ strawberry population controlling the content of esters based on Kruskal-Wallis (K-W) and interval mapping (IM). The position of the LOD peak (in cM) and the most closely associated marker locus is indicated. Those QTLs identified in two or all three years are indicated in bold.

Volatile	QTL	Year	LG	K-W <sup>a</sup>	Thresh.	LOD	Position	Closest marker	R <sup>2</sup> (%) <sup>d</sup>	GIC <sup>c</sup>	Transf.
Ethyl acetate	<i>02III-6</i>	2009 <sup>e</sup>	LGIII-M.6	***	4.4	3.2	27.5	cca/agt-475 <sup>b</sup>	50.6	0.34	Ln
Butyl acetate	<i>13VI-1</i>	2007	LGVI-F.1	****	5.2	8.6	15.7	ChFaM001-230/235 <sup>b</sup>	34.6	0.95	Ln
		2007	LGVI-M.1	****	5.3	8.6	16.5	ChFaM001-230/235 <sup>b</sup>	34.6	0.95	Ln
		2008	LGVI-F.1	****	4.7	11.3	21.5	ChFvM205-133/114 <sup>b</sup>	44.0	1.00	Ln
		2008	LGVI-M.1	****	4.7	11.5	22.5	ChFvM205-133/116 <sup>b</sup>	45.5	1.00	Ln
		2009	LGVI-F.1	****	4.5	9.1	9.0	ChFaM001-230/235 (15.7)	49.9	0.75	Ln
		2009	LGVI-M.1	****	4.4	9.1	12.0	ChFaM001-230/235 (16.5)	46.7	0.80	Ln
Methyl pentanoate	<i>14I-1</i>	2008	LGI-F.1	****	3.9	5.6	45.5	ChFaM149-184/198 <sup>b</sup>	25	0.98	Ln
		2008	LGI-M.1b	****	4	5.5	6.6	ChFaM149-184/198 <sup>b</sup>	24.7	0.48	Ln
	<i>14I-2</i>	2008	LGI-F.2	***	3.9	5.4	23.7	F3H-S2 (23.9)	26	0.95	Ln
		2008	LGI-M.2	***	4	5.2	0.4	UFFxa16H7-265/249 <sup>b</sup>	23.3	1.00	Ln
		2009 <sup>z</sup>	LGI-F.2	*	4.2	3.2	7.6	ChFaM151-218 <sup>b</sup>	23.8	1.00	Ln
	<i>14VI-1</i>	2008	LGVI-F.1	****	3.9	4.9	9.0	ChFaM001-230/235 (15.7)	27.8	0.75	Ln
2008		LGVI-M.1	****	4	4.9	12.0	ChFaM001-230/235 (16.5)	26.6	0.79	Ln	
3-methylbutyl acetate	<i>19III-2</i>	2007	LGIII-F.2	****	4.1	6.3	33.1	ChFaM009-556 (30.1)	33.6	0.91	Ln
		2007	LGIII-M.2	****	4.1	6.7	45.2	ChFaM214-166 (39.1)	35.2	0.84	Ln
		2008	LGIII-F.2	****	4	7.2	36.1	ChFaM129-190 (38.2)	41.1	0.93	Ln
		2008	LGIII-M.2	****	4	9.2	33.5	cct/aca-213 (30.5)	40.2	0.92	Ln
		2009	LGIII-F.2	****	4	6.4	29.5	ChFaM088-156 <sup>b</sup>	32.7	1.00	Ln
		2009	LGIII-M.2	****	4.1	6.4	27.5	cct/aca-213 (30.5)	29.8	0.93	Ln
	<i>19III-6</i>	2008	LGIII-F.6	****	4.1	7.0	0.0	ChFaM159-257 <sup>b</sup>	40.4	0.93	Ln
		2008	LGIII-M.6	****	3.9	6.2	3.0	ChFaM159-257 (0.0)	47.9	0.30	Ln
	<i>19I-2</i>	2009	LGI-F.2	**	4	4.0	25.6	F3H-S4 <sup>b</sup>	18.2	0.99	Ln
2-methylbutyl acetate	<i>20III-2</i>	2007	LGIII-M.2	****	4.1	4.9	57.1	ChFvM140-114 <sup>b</sup>	29.1	0.99	Ln
		2008	LGIII-M.2	****	4	5.5	51.2	BFACT045-175 (54.0)	36.2	0.90	Ln
	<i>20III-1</i>	2008	LGIII-F.1	****	4	4.7	4.2	caa/aac-278 <sup>b</sup>	23.6	1.00	Ln
		2008	LGIII-M.1	****	4	4.5	0.0	ChFaM112-178 <sup>b</sup>	24.3	0.79	Ln
Methyl hexanoate	<i>28I-1</i>	2008	LGI-F.1	****	4	4.5	45.5	ChFaM149-184/198 <sup>b</sup>	20.5	0.98	Ln
		2008	LGI-M.1b	****	4.2	4.4	6.6	ChFaM149-184/198 <sup>b</sup>	20.1	0.48	Ln
		2009	LGI-F.1	***	4.1	5	28.0	F3H-S3 <sup>b</sup>	25.3	1.00	Ln
	<i>28IV-1</i>	2007 <sup>c</sup>	LGIV-F.1a	*	3.9	3.8	84.5	ChFaM023-163 <sup>b</sup>	41.9	0.98	SQRT
	2009 <sup>c</sup>	LGIV-F.1a	****	4.1	4.1	66.4	ChFvM232-188 <sup>b</sup>	26.3	1.00	Ln	
Butyl butanoate	<i>33VI-1</i>	2007 <sup>c</sup>	LGVI-F.1	***	4.8	3.6	15.7	ChFaM001-230/235 <sup>b</sup>	16.2	0.95	Ln
		2007 <sup>c</sup>	LGVI-M.1	***	4.9	3.6	16.5	ChFaM001-230/235 <sup>b</sup>	16.2	0.95	Ln
		2008	LGVI-F.1	****	5.5	5.9	21.5	ChFvM205-133/114 <sup>b</sup>	26.3	1.00	Ln
		2008	LGVI-M.1	****	5.4	6	22.5	ChFvM205-133/116 <sup>b</sup>	26.7	1.00	Ln
		2009	LGVI-F.1	****	5	6.5	6.0	cca/agt-900 (0.0)	46.1	0.70	Ln
		2009	LGVI-M.1	****	5.1	6.5	9.0	ChFaM001-230/235 (16.5)	44.1	0.72	Ln
Ethyl hexanoate	<i>35II-3</i>	2009	LGII-M.3	-	4	4.2	22.8	ChFvM201-224 (24.8)	38.5	0.87	Ln
Hexyl acetate	<i>40VI-1</i>	2007	LGVI-F.1	*	4.2	4.2	0.0	cca/agt-900 <sup>b</sup>	35.2	0.64	Ln
		2007	LGVI-M.1	*	4.1	4.3	0.0	cca/agt-900 <sup>b</sup>	36.3	0.64	Ln
		2009 <sup>c</sup>	LGVI-M.1	*	4.7	3.5	20.1	Fvi20-164/166 <sup>b</sup>	16.0	1.00	-
Methyl benzoate	<i>56I-5</i>	2007	LGI-F.1	**	4.1	4.2	38.4	ARSFL092-183 (39.7)	23.5	0.80	Ln
		2007 <sup>c</sup>	LGI-M.1b	*	4.3	3.1	0.0	ARSFL092-183 <sup>b</sup>	14.2	0.46	Ln
		2008	LGI-F.1	****	4.2	6.3	38.4	ARSFL092-183 (39.7)	31.3	0.80	Ln
		2008	LGI-M.1b	****	4.1	5.4	6.6	ChFaM149-184/198 <sup>b</sup>	24.2	0.48	Ln
		2009	LGI-F.1	****	5.3	11	35.4	ARSFL092-183 (39.7)	50.5	0.79	1/SQR
		2009	LGI-M.1b	****	5.4	5.9	6.6	ChFaM149-184/198 <sup>b</sup>	25.4	0.48	1/SQR
Methyl octanoate	<i>57IV-1</i>	2007	LGIV-F.1a	*	3.9	6.2	72.9	ChFvM028176c <sup>b</sup>	52.4	1.00	SQRT
Benzyl acetate	<i>59I-1</i>	2007	LGI-F.1	****	4.3	4.4	39.7	ARSFL092-183 <sup>b</sup>	25.8	0.83	Ln
		2007	LGI-M.1b	****	3.9	4.2	0.0	ARSFL092-183 <sup>b</sup>	20.0	0.46	Ln
		2008	LGI-F.1	****	4.2	6.8	45.5	ChFaM149-184/198 <sup>b</sup>	29.5	0.98	Ln
		2008	LGI-M.1b	****	4.2	6.3	6.6	ChFaM149-184/198 <sup>b</sup>	27.5	0.48	Ln
		2009	LGI-F.1	****	4.2	5.1	39.7	ARSFL092-183 <sup>b</sup>	27.7	0.83	Ln
		2009	LGI-M.1b	****	4.3	4.9	6.6	ChFaM149-184/198 <sup>b</sup>	21.8	0.48	Ln
	<i>59VII-1</i>	2007	LGVII-F.1c	****	4.3	7.9	9.0	EMFv021-196 (0.0)	51.1	0.71	Ln
		2008	LGVII-F.1c	****	4.2	5	6.0	EMFv021-196 (0.0)	32.0	0.78	Ln
		2009	LGVII-F.1c	****	4.2	7.4	18.0	EMFv021-196 (0.0)	53.9	0.65	Ln
	Butyl hexanoate	<i>60VI-1</i>	2007 <sup>c</sup>	LGVI-F.1	***	5.4	3.6	15.7	ChFaM001-230/235 <sup>b</sup>	16.4	0.95
2008			LGVI-F.1	****	4.7	5.1	21.5	ChFvM205-133/114 <sup>b</sup>	23.1	1.00	Ln
2008			LGVI-M.1	***	4.7	5.2	22.5	ChFvM205-133/116 <sup>b</sup>	23.5	1.00	Ln
2009			LGVI-F.1	****	5.2	7	9.0	ChFaM001-230/235 (15.7)	46.8	0.75	Ln
2009			LGVI-M.1	****	5.1	7	9.0	ChFaM001-230/235 (16.5)	48.1	0.72	Ln
<i>60V-2</i>		2008 <sup>c</sup>	LGV-M.2	***	4.7	4.4	0.0	ChFaM106-144 <sup>b</sup>	63.9	1.00	Ln
<i>60V-1</i>		2009 <sup>c</sup>	LGV-M.1	***	5.1	3.8	39.4	UDF034-155 (47.7)	30.3	0.82	Ln
Octyl acetate	<i>63VI-1</i>	2007	LGVI-F.1	****	5.3	10.7	15.7	ChFaM001-230/235 <sup>b</sup>	40.9	0.95	Ln
		2007	LGVI-M.1	****	5.3	10.7	16.5	ChFaM001-230/235 <sup>b</sup>	40.9	0.95	Ln
		2008	LGVI-F.1	****	5.5	10.9	12.0	ChFaM001-230/235 (15.7)	52.4	0.83	Ln
		2008	LGVI-M.1	****	5.3	10.9	12.0	ChFaM001-230/235 (16.5)	53.8	0.80	Ln
		2009	LGVI-F.1	****	7.4	18.3	9.0	ChFaM001-230/235 (15.7)	72.6	0.75	Ln
		2009	LGVI-M.1	****	7.5	18.3	9.0	ChFaM001-230/235 (16.5)	72.8	0.72	Ln
Nonyl acetate	<i>71VI-1</i>	2008 <sup>c</sup>	LGVI-F.1	-	4.0	3.3	15.7	ChFaM001-230/235 <sup>b</sup>	15.8	0.95	Ln
		2008 <sup>c</sup>	LGVI-M.1	-	4.1	3.3	16.5	ChFaM001-230/235 <sup>b</sup>	15.8	0.95	Ln
		2009	LGVI-F.1	****	3.9	6.7	12.0	ChFaM001-230/235 (15.7)	33.2	0.83	Ln
		2009	LGVI-M.1	****	4.1	6.7	12.0	ChFaM001-230/235 (16.5)	34.2	0.80	Ln
Methyl decanoate	<i>72III-6</i>	2007 <sup>c</sup>	LGIII-M.6	*	6.4	5.9	22.2	ChFaM009-558 <sup>b</sup>	55.5	0.35	SQRT
		2009	LGIII-M.6	-	4.5	4.6	0.0	ChFaM159-257 <sup>b</sup>	57.4	0.32	SQRT

Volatile	QTL	Year	LG	K-W <sup>a</sup>	Thresh.	LOD	Position	Closest marker	R <sup>2</sup> (%) <sup>d</sup>	GIC <sup>c</sup>	Transf.
	<i>72IV-1</i>	2007	LGIV-F.1a	***	6.5	8.8	64.9	EMFvi136-154 <sup>b</sup>	61.9	1.00	SQRT
		2009	LGIV-F.1a	***	4.4	5.0	66.4	ChFvM232-188 <sup>b</sup>	43.7	0.99	SQRT
(-)-myrtenyl acetate	<i>73I-2</i>	2008 <sup>c</sup>	LGI-F.2	-	4.7	4.2	7.6	UDF002-129 <sup>b</sup>	28.3	1.00	-
		2009	LGI-F.2	***	8.8	10.1	6.5	ChFvM191-204 <sup>b</sup>	64	1.00	-
Hexyl hexanoate	<i>75III-2</i>	2008	LGIII-F.2	**	4.1	4.2	43.7	ChFvM234-174 <sup>b</sup>	21.2	1.00	SQRT
Octyl butanoate	<i>76VI-1</i>	2007	LGVI-F.1	****	5.3	5.9	15.7	ChFaM001-230/235 <sup>b</sup>	25.4	0.95	Ln
		2007	LGVI-M.1	****	5.1	5.9	16.5	ChFaM001-230/235 <sup>b</sup>	25.4	0.95	Ln
		2008	LGVI-F.1	****	4.9	5.3	21.5	ChFvM205-133/114 <sup>b</sup>	23.6	1.00	Ln
		2008	LGVI-M.1	****	5	5.4	22.5	ChFvM205-133/116 <sup>b</sup>	24.7	1.00	Ln
		2009	LGVI-F.1	****	6.5	10.7	9.0	ChFaM001-230/235 (15.7)	61.2	0.73	Ln
		2009	LGVI-M.1	****	6.5	10.7	9.0	ChFaM001-230/235 (16.5)	61.8	0.72	Ln
Ethyl decanoate	<i>77III-1</i>	2009	LGIII-F.1	****	4.1	4.2	4.2	caa/aac-278 <sup>b</sup>	20.4	0.90	Ln
		2009	LGIII-M.1	****	4.1	4.1	8.7	caa/aac-139 <sup>b</sup>	18.7	0.90	Ln
1-methyloctyl butanoate	<i>78IV-3</i>	2009	LGIV-F.3	*	4.3	4.9	17.2	caa/aaa-350 <sup>b</sup>	48.9	1.00	Ln
Decyl acetate	<i>79VI-1</i>	2007 <sup>c</sup>	LGVI-F.1	****	8.9	7.6	15.7	ChFaM001-230/235 <sup>b</sup>	31.3	0.95	Ln
		2007 <sup>c</sup>	LGVI-M.1	****	8.7	7.6	16.5	ChFaM001-230/235 <sup>b</sup>	31.3	0.95	Ln
		2008	LGVI-F.1	****	4.9	8.7	15.0	ChFaM001-230/235 (15.7)	37.3	0.93	Ln
		2008	LGVI-M.1	****	4.9	8.7	12.0	ChFaM001-230/235 (16.5)	46.7	0.80	Ln
		2009	LGVI-F.1	****	6.8	20.8	9.0	ChFaM001-230/235 (15.7)	81.6	0.75	Ln
		2009	LGVI-M.1	****	6.9	20.9	9.0	ChFaM001-230/235 (16.5)	81.8	0.72	Ln
	<i>79III-6</i>	2009	LGIII-F.6	-	6.8	7.2	18.0	cca/agt-475 (23.5)	75.7	0.76	Ln
Cinnamyl acetate	<i>81VI-1</i>	2007 <sup>c</sup>	LGVI-F.1	***	6.9	6.0	22.3	ChFaM163-130 <sup>b</sup>	26.1	1.00	Ln
		2008	LGVI-F.1	****	5.1	5.9	21.5	ChFvM205-133/114 <sup>b</sup>	26.2	1.00	Ln
		2008	LGVI-M.1	****	5	5.9	22.5	ChFvM205-133/116 <sup>b</sup>	26.5	1.00	Ln
		2009	LGVI-F.1	****	4.4	11.3	18.7	Fvi20-166/0 (19.1)	43.8	0.98	SQRT
		2009	LGVI-M.1	****	4.4	11.3	19.5	Fvi20-164/0 (20.1)	44.1	0.97	SQRT
Octyl hexanoate	<i>85VI-1</i>	2007 <sup>c</sup>	LGVI-F.1	****	5.5	5.1	15.7	ChFaM001-230/235 <sup>b</sup>	22	0.95	Ln
		2007 <sup>c</sup>	LGVI-M.1	****	5.4	5.1	16.5	ChFaM001-230/235 <sup>b</sup>	22	0.95	Ln
		2008	LGVI-F.1	****	4.6	5.4	21.5	ChFvM205-133/114 <sup>b</sup>	24.3	1.00	Ln
		2008	LGVI-M.1	****	4.8	5.6	22.5	ChFvM205-133/116 <sup>b</sup>	25.4	1.00	Ln
		2009	LGVI-F.1	****	5.8	9.9	9.0	ChFaM001-230/235 (15.7)	59.4	0.75	Ln
		2009	LGVI-M.1	****	5.7	10	9.0	ChFaM001-230/235 (16.5)	60.1	0.72	Ln

<sup>a</sup>Significance level of Kruskal-Wallis test. \*, p<0.005; \*\*, p<0.001; \*\*\*, p<0.0005; \*\*\*\*, p<0.0001.

<sup>b</sup>Marker in LOD peak.

<sup>c</sup>QTL detected below the threshold or just by one method.

<sup>d</sup>Percentage of the variance explained by the QTL.

<sup>e</sup>Genotypic information coefficient for the F or M parental line.



**Supplemental Table S3.** QTLs detected in the ‘232’ × ‘1392’ strawberry population controlling the content of alcohols and terpene alcohols based on Kruskal-Wallis (K-W) and interval mapping (IM). The position of the LOD peak (in cM) and the most closely associated marker locus is indicated. Those QTLs identified in two or all three years are indicated in bold.

Volatile	QTL	Year	Location	K-W	Thr.	LOD	Position	Closest marker	R <sup>2</sup> (%) <sup>d</sup>	GIC <sup>e</sup>	Transf.
(E)-2-hexen-1-ol	<b>17III-1</b>	2008	LGIII-F.1	****	4	4.7	7.1	caa/aac-139 <sup>b</sup>	21.6	0.93	SQRT
		2008	LGIII-M.1	****	4.1	4.8	8.7	caa/aac-139 <sup>b</sup>	22.8	0.90	SQRT
1-hexanol	<b>18III-1</b>	2008	LGIII-F.1	****	4.2	4.8	7.0	UDF004-150 <sup>b</sup>	21.7	0.93	SQRT
		2008	LGIII-M.1	****	4.1	4.9	8.7	caa/aac-139 <sup>b</sup>	22.2	0.90	SQRT
2-heptanol	<b>24V-2</b>	2008	LGIV-M.2	****	5.4	6.8	0.0	ChFaM106-144 <sup>b</sup>	68.5	1.00	Ln
1-octanol	<b>50VI-1</b>	2007	LGVI-F.1	****	4.1	5.3	15.7	ChFaM001-230/235 <sup>b</sup>	22.9	0.95	Ln
		2007	LGVI-M.1	****	4.3	5.3	16.5	ChFaM001-230/235 <sup>b</sup>	22.9	0.95	Ln
		2008	LGVI-F.1	***	4.3	4.3	15.0	ChFaM001-230/235 (15.7)	20.3	0.93	1/SQRT
		2008	LGVI-M.1	***	4.2	4.3	16.5	ChFaM001-230/235 <sup>b</sup>	19.6	0.95	1/SQRT
		2009	LGVI-F.1	****	4.2	6.4	15.7	ChFaM001-230/235 <sup>b</sup>	27.4	0.95	Ln
		2009	LGVI-M.1	****	4.3	6.4	16.5	ChFaM001-230/235 <sup>b</sup>	27.3	0.95	Ln
		2008	LGVI-M.2	***	4.2	4.4	6.1	ChFaM044-226 <sup>b</sup>	38.8	1.00	1/SQRT
		2009	LGVII-F.3	***	4.2	4.2	24.2	CHI-520/550 <sup>b</sup>	18.8	0.82	Ln
1-decanol	<b>70VI-1</b>	2008 <sup>c</sup>	LGVI-F.1	***	9.9	9.5	0.0	cca/agt-900 <sup>b</sup>	74.6	0.64	Ln
		2008 <sup>c</sup>	LGVI-M.1	***	10	9.6	0.0	cca/agt-900 <sup>b</sup>	74.7	0.64	Ln
		2009	LGVI-F.1	****	4.1	5.2	9.0	ChFaM001-230/235 (15.7)	29.5	0.75	Ln
		2009	LGVI-M.1	****	4.2	5.2	9.0	ChFaM001-230/235 (16.5)	30.1	0.72	Ln
	<b>70IV-2</b>	2009	LGIV-M.2	-	4.2	4.8	5.8	cca/agg-630 <sup>b</sup>	47.7	0.98	Ln
Eugenol	<b>74I-2</b>	2009	LGI-F.2	***	4.5	4.5	25.1	ChFaM083-S1/S2 <sup>b</sup>	20.3	0.99	Ln
		2009	LGI-M.2	**	4.5	5.1	2.9	EMFn182-186 <sup>b</sup>	26.2	1.00	Ln
	<b>74V-2</b>	2008 <sup>c</sup>	LGVI-M.2	***	4.8	3.7	0.0	ChFaM106-144 <sup>b</sup>	20.5	1.00	Ln
		2009 <sup>c</sup>	LGVI-M.2	**	4.5	2.9	0.0	ChFaM106-144 <sup>b</sup>	21.4	1.00	Ln
Linalool	<b>54VI-1</b>	2007 <sup>c</sup>	LGVI-F.1	*	4.5	3.2	15.7	ChFaM001-230/235 <sup>b</sup>	14.5	0.95	-
		2007 <sup>c</sup>	LGVI-M.1	*	4.6	3.2	16.5	ChFaM001-230/235 <sup>b</sup>	14.5	0.95	-
		2008	LGVI-F.1	****	4.1	5.1	9.0	ChFaM001-230/235 (15.7)	33.7	0.75	Ln
		2008	LGVI-M.1	****	4.2	5.1	12.0	ChFaM001-230/235 (16.5)	31.5	0.79	Ln
		2009	LGVI-M.2	****	4.1	4.8	9.7	cct/atg-750 <sup>b</sup>	30.3	1.00	Ln
Terpineol	<b>65I-2</b>	2007	LGI-F.2	-	4	4.5	25.1	ChFaM083-S1/S2 <sup>b</sup>	19.9	1.00	Ln
		2007	LGI-M.2	*	4.1	4.5	2.9	EMFn182-186 <sup>b</sup>	20.3	1.00	Ln
		2008	LGI-F.2	*	4.4	5.3	20.7	F3H-S2 (23.9)	32.1	0.85	SQRT
		2008	LGI-M.2	*	4.3	5.0	0.0	F3H-S2 <sup>b</sup>	23	1.00	SQRT
		2009	LGI-F.2	***	4	4.9	23.7	F3H-S2 (23.9)	25.3	0.95	Ln
		2009	LGI-M.2	***	4	4.9	0.0	F3H-S2 <sup>b</sup>	22.2	1.00	Ln
	<b>65VI-1</b>	2008 <sup>c</sup>	LGVI-F.1	*	4.4	4.3	6.0	cca/agt-900 (0.0)	28	0.70	SQRT
		2008	LGVI-M.1	*	4.3	4.3	6.0	cca/agt-900 (0.0)	28.6	0.67	SQRT
	<b>65VI-2</b>	2007	LGVI-M.2	*	4.1	5.0	13.7	cct/aca-151 (10.7)	40.7	0.90	Ln
		2008	LGVI-M.2	****	4.3	5.8	13.7	cct/aca-151 (10.7)	39.9	0.90	SQRT
		2009	LGVI-M.2	****	4	5.5	9.7	cct/atg-750 <sup>b</sup>	25.7	1.00	Ln
Myrtenol	<b>66I-2</b>	2007 <sup>c</sup>	LGI-F.2	***	5.8	4.1	28.6	F3H-S4 (25.6)	24.9	0.60	1/SQRT
		2008	LGI-F.2	*	4.1	4.4	7.6	UDF002-129 <sup>b</sup>	48.7	1.00	Ln
		2009	LGI-F.2	-	4.2	4.2	5.6	UDF002-129 <sup>b</sup>	47.9	1.00	Ln
Nerolidol	<b>84IV-1</b>	2007	LGIV-F.1a	****	4.3	5.5	21.6	BFACT037-198 <sup>b</sup>	35.6	1.00	SQRT
		2007 <sup>c</sup>	LGIV-M.1b	****	4.4	4.1	0.0	ChFaM014-141 <sup>b</sup>	18.2	0.98	SQRT
		2008	LGIV-F.1a	****	4.8	6.0	71.4	ChFvM087-224 <sup>b</sup>	67	1.00	SQRT
		2008	LGIV-M.1b	****	5.1	5.5	0.0	ChFaM014-141 <sup>b</sup>	34.2	0.98	SQRT

<sup>a</sup>Significance level of Kruskal-Wallis test. \*, p<0.005; \*\*, p<0.001; \*\*\*, p<0.0005; \*\*\*\*, p<0.0001.

<sup>b</sup>Marker in LOD peak.

<sup>c</sup>QTL detected below the threshold or just by one method.

<sup>d</sup>Percentage of the variance explained by the QTL.

<sup>e</sup>Genotypic information coefficient for the F or M parental line.

**Supplemental Table S4.** QTLs detected in the ‘232’ × ‘1392’ strawberry population controlling the content of aldehydes, ketones and furans based on Kruskal-Wallis (K-W) and interval mapping (IM). The position of the LOD peak (in cM) and the most closely associated marker locus is indicated. Those QTLs identified in two or all three years are indicated in bold.

Volatile	QTL	Year	Location	K-W	Thr.	LOD	Position	Closest marker	R <sup>2</sup> (%) <sup>d</sup>	GIC <sup>e</sup>	Transf.
(E)-2-pentenal	<i>09III-2</i>	2009	LGIII-M.2	***	4	6.7	57.1	ChFvM140-114 <sup>b</sup>	44.5	1.00	1/SQRT
Heptanal	<i>25V-4</i>	2009	LGIV-M.4	**	3.8	4	53.1	ChFaM269-445 <sup>b</sup>	37.1	1.00	Ln
(E)-2-heptenal	<i>29III-2</i>	2008 <sup>c</sup>	LGIII-M.2	-	4.2	<b>4.02</b>	<b>54.0</b>	<b>BFACT045-175<sup>b</sup></b>	<b>31.5</b>	<b>1.00</b>	-
		2009	LGIII-M.2	****	4.7	<b>8.3</b>	<b>57.1</b>	<b>ChFvM140-114<sup>b</sup></b>	<b>73.9</b>	<b>1.00</b>	-
	<i>29VII-2</i>	2009	LGVII-F.2	***	4.7	4.9	8.1	caa/aac-177 <sup>b</sup>	22.0	0.38	-
		2009	LGVII-M.2	***	4.7	5.1	55.0	caa/aac-177 <sup>b</sup>	23.1	0.72	-
Benzaldehyde	<i>31IV-6</i>	2008	LGIV-F.6	***	4	6.2	7.1	ChFvM232-183 (8.6)	33.6	0.91	Ln
(E)-2-octenal	<i>49III-2</i>	2009 <sup>c</sup>	LGIII-M.2	***	4.2	4.1	55.6	γ-decalactone <sup>b</sup>	35.2	1.00	1/SQRT
Nonanal	<i>55IV-1</i>	2007	LGIV-F.1a	-	4.1	4.7	64.9	EMFvi136-154 <sup>b</sup>	49.7	1.00	-
(E)-2-decenal	<i>69III-2</i>	2009	LGII-M.2	****	3.9	4.4	57.1	ChFvM140-114 <sup>b</sup>	21.5	1.00	Ln
1-penten-3-one	<i>05III-1</i>	2008 <sup>c</sup>	LGIII-F.1	*	4	<b>3.4</b>	<b>44.7</b>	<b>PBCESSRFa12-212/214<sup>b</sup></b>	<b>15.8</b>	<b>1.00</b>	<b>SQRT</b>
		2008 <sup>c</sup>	LGIII-M.1	*	3.9	3.6	41.7	<b>PBCESSRFa12-212/206 (38.7)</b>	<b>18.9</b>	<b>0.88</b>	<b>SQRT</b>
		2009	LGIII-F.1	**	4	4.1	19.1	<b>BFACT036-159/130 (22.6)</b>	<b>22.5</b>	<b>0.86</b>	<b>1/SQRT</b>
		2009	LGIII-M.1	**	4.1	4.1	<b>24.3</b>	<b>BFACT036-159/135<sup>b</sup></b>	<b>18.4</b>	<b>1.00</b>	<b>1/SQRT</b>
	<i>05III-2</i>	2009	LGIII-M.2	*	4.1	5.1	57.1	ChFvM140-114 <sup>b</sup>	39.8	1.00	1/SQRT
2-heptanone	<i>21III-1</i>	2008	LGIII-M.1	***	4	4.0	0.0	ChFaM112-178 <sup>b</sup>	21.7	0.78	SQRT
6-methyl-5-hepten-2-one	<i>32VI-1</i>	2007	LGVI-F.1	*	4.5	5.3	0.0	cca/agt-900 <sup>b</sup>	51.5	0.64	-
		2007	LGVI-M.1	*	4.4	5.3	0.0	cca/agt-900 <sup>b</sup>	51.7	0.64	-
		2008 <sup>c</sup>	LGVI-F.1	-	5.5	4.3	0.0	cca/agt-900 <sup>b</sup>	49.7	0.64	-
		2008 <sup>c</sup>	LGVI-M.1	-	5.4	4.3	0.0	cca/agt-900 <sup>b</sup>	50.1	0.64	-
		2009	LGVI-F.1	-	5.1	7.3	0.0	cca/agt-900 <sup>b</sup>	56.9	0.64	-
		2009	LGVI-M.1	*	5	7.3	0.0	cca/agt-900 <sup>b</sup>	57.0	0.64	-
2-nonanone	<i>52III-1</i>	2008	LGIII-F.1	****	4.2	4.3	4.2	caa/aac-278 <sup>b</sup>	21.0	1.00	Ln
		2008	LGIII-M.1	****	4.2	5.0	0.0	ChFaM112-178 <sup>b</sup>	30.7	0.78	Ln
	<i>52III-6</i>	2007	LGIII-F.6	*	4.1	4.3	26.5	ChFaM009-558 (27.9)	25.7	0.69	Ln
Mesifurane	<i>48VII-2</i>	2007	LGVII-F.2	****	4.8	11.1	18.3	Mesifurane <sup>b</sup>	42.0	0.45	SQRT
		2007	LGVII-M.2	****	4.8	11.1	65.1	Mesifurane <sup>b</sup>	42.0	0.45	SQRT
		2008	LGVII-F.2	****	4.2	15.4	18.3	Mesifurane <sup>b</sup>	55.6	0.45	SQRT
		2008	LGVII-M.2	****	4.3	15.4	65.1	Mesifurane <sup>b</sup>	55.6	0.45	SQRT
		2009	LGVII-F.2	****	4.8	21.3	13.8	ChFaM160-187 <sup>b</sup>	67.3	0.44	SQRT
		2009	LGVII-M.2	****	4.6	21.4	60.7	ChFaM160-187 <sup>b</sup>	67.3	0.44	SQRT
γ-decalactone	<i>82III-2</i>	2007	LGIII-M.2	****	13.4	26	54.0	BFACT045-175 <sup>b</sup>	84.4	1.00	-
		2008	LGIII-M.2	****	7.4	21.5	51.1	BFACT045-175 (54.0)	92.8	0.90	-
		2009	LGIII-M.2	****	14.1	29.6	51.1	BFACT045-175 (54.0)	90.0	0.90	-
γ-dodecalactone	<i>87III-1</i>	2009	LGIII-F.1	***	4.3	4.7	7.1	caa/aac-139 <sup>b</sup>	22.8	0.93	Ln
		2009	LGIII-M.1	***	4.3	4.8	8.7	caa/aac-139 <sup>b</sup>	24.3	0.90	Ln
	<i>87VII-1</i>	2007	LGVII-F.1c	****	5.5	8.1	6.0	EMFv021-196 (0.0)	67.7	0.78	Ln
		2008	LGVII-F.1c	****	4	4.2	9.0	EMFv021-196 (0.0)	32.0	0.71	SQRT
2009	LGVII-F.1c	****	4.3	8.5	0.0	EMFv021-196 <sup>b</sup>	50.9	1.00	Ln		

<sup>a</sup>Significance level of Kruskal-Wallis test. \*, p<0.005; \*\*, p<0.001; \*\*\*, p<0.0005; \*\*\*\*, p<0.0001.

<sup>b</sup>Marker in LOD peak.

<sup>c</sup>QTL detected below the threshold or just by one method.

<sup>d</sup>Percentage of the variance explained by the QTL.

<sup>e</sup>Genotypic information coefficient for the F or M parental line.