

Supplementary tables

Table S1. Primers used in this study

Name	Table S1. Primers	Enzyme site	Amplic on size
<i>ilvA</i> HLarm	F: CCCAAGCTTAAGCACCTGAGTTTCCGTTA	<i>EcoR</i> I	522bp
	R: ACGCGTCGACGTACAGATTCCTTTCTTGTTTTA	<i>Kpn</i> I	
<i>Cm</i>	F: CGGGGTACCATAGTGACTGGCGATGCTG	<i>Kpn</i> I	1083 bp
	R: ACGCGTCGACTTAAGTTATTGGTATGACTGGTT	<i>Sal</i> I	
<i>ilvA</i> HRarm	F: CCGGAATTCCTAACCTGTCCTTACTGTCCCA	<i>Sal</i> I	446 bp
	R: CGGGGTACCTTTTTTTTCGCAACCGCGCAAAATG	<i>Hind</i> III	
<i>ilvA</i> DEDP	F: ATTCTGGCAGTGTGAGCGTTA		2591 bp
	R: CAACACTAAATGATACGATGCG		
<i>serA</i> HLarm	F: CCCGAGCTCTTTCACCTTCACTCTCTCCTT	<i>Sac</i> I	502 bp
	R: CGGGGTACCCGTTAGATTTCCTCCTAA	<i>Kpn</i> I	
<i>Cm</i>	F: CGGGGTACCATAGTGACTGGCGATGCTG	<i>Kpn</i> I	1083 bp
	R: CGCGGATCCTTAAGTTATTGGTATGACTGGTT	<i>Bam</i> H I	
<i>serA</i> HRarm	F: CGCGGATCCTCAAAAAAACTCAAGCTA	<i>Bam</i> H I	223 bp
	R: ACGCGTCGACAGACCGTCCCATTATTACA	<i>Sal</i> I	
<i>serA</i> DEDP1	F: ATCAAAATGGTCATCGCTG		2489 bp
	R: GAAGCCTGGAAATAGACGAA		
<i>serA</i>	F: ACGCGTCGACCGGTTTACAGCCACTT	<i>Sph</i> I	1505 bp
	R: ACATGCATGCCAGGGACATTTGTTAGTTC	<i>Sal</i> I	
<i>Erm</i>	F: AACTGCAGAATTAAGTCGTAAACCGTGTGC	<i>Pst</i> I	1206 bp
	R: AACTGCAGAGGTGTCACAAGACACTCTTTT	<i>Pst</i> I	
<i>serA</i> DEDP2	F: TTTCACCTTCACTCTCTCCTT		3509 bp
	R: AGACCGTCCCATTATTACA		
<i>serART</i> -qPCR	F: TGCCAAACTTGAAACATCG		203 bp
	R: TAAAGGTGCTTCGGTCTCC		
<i>ilvA</i> RT-qPCR	F: TCCGCCTCACAGCACTCTA		131 bp
	R: ATGCCGTCTACTACACCTA		
<i>16S</i> RT-qPCR	F: ACTCCTACGGGAGGCAGCAG		197 bp
	R ATTACCGCGGCTGCTGG		

Table S2. Transcriptome data at 37°C and 53°C

	CT53_1	CT53_2	CT53_3	AT37_1	AT37_2	AT37_3	log ₂ FC (BJ3-2 53°C/37°C)
<i>serA</i>	881.91	982.12	1133.54	222.02	193.67	255.01	2.16
<i>ilvA</i>	550.84	783.55	774.66	208.35	139.05	178.90	2.00

Table S3. Reverse transcription-quantitative real-time PCR at 37°C and 53°C

	37°C-2^{-ΔΔCT}	53°C-2^{-ΔΔCT}	log₂FC (BJ3-2 53°C/37°C)
<i>serA</i>	1.34	11.52	3.10
	0.85	12.43	3.86
	0.86	10.90	3.65
<i>sdaAA</i>	1.22	9.94	3.30
	0.88	11.03	3.65
	0.94	12.07	3.69

Table S4. Relative content(ug/kg) of volatile compounds in four samples by HS-SPME-GC-O-MS (μg/kg)

No.	Aroma Compounds	CAS	RI ^a	RI ^b	Compound Content (μg /kg)				Identification method ^c
					BJ3-2	BJ3-2 <i>ΔilvA</i>	BJ3-2 <i>ΔserA</i>	BJ3-2 <i>ΔserAΔilvA</i>	
A	Pyrazines								
A1	Pyrazine	290-37-9	1211	1214	6.48 ± 1.20	6.26 ± 0.10	6.87 ± 0.29	8.62 ± 0.24	MS/RI
A2	2-Methylpyrazine	109-08-0	1268	1270	60.00 ± 2.26	43.72 ± 1.17	55.55 ± 4.02	57.85 ± 2.73	MS/RI
A3	2,5-Dimethylpyrazine	123-32-0	1325	1326	1106.16 ± 4.72	834.62 ± 23.12	1107.94 ± 42.94	1425.37 ± 21.40	MS/RI/O/S
A4	2,6-Dimethylpyrazine	108-50-9	1332	1334	68.20 ± 1.90	59.65 ± 3.04	61.98 ± 5.39	98.82 ± 2.32	MS/RI/O
A5	2,3-Dimethylpyrazine	5910-89-4	1350	1346	76.74 ± 0.97	87.03 ± 3.42	85.95 ± 3.19	113.48 ± 0.66	MS/RI/O/S
A6	2-Methyl-5-ethylpyrazine	13360-64-0	1372	1376	ND	143.90 ± 43.86	138.70 ± 44.94	13.14 ± 0.50	MS/RI/O
A7	2-Methyl-6-ethylpyrazine	13925-03-6	1388	1390	ND	ND	ND	7.10 ± 0.35	MS/RI
A8	2,3,5-Trimethylpyrazine	14667-55-1	1408	1408	1236.30 ± 3.18	1291.51 ± 8.70	1275.14 ± 37.96	1416.78 ± 25.19	MS/RI/O/S
A9	3-Ethyl-2,5-dimethylpyrazine	13360-65-1	1445	1447	58.21 ± 0.50	45.87 ± 1.33	64.29 ± 4.80	79.00 ± 3.65	MS/RI/O/S
A10	5-Ethyl-2,3-dimethylpyrazine	15707-34-3	1463	1460	30.18 ± 0.66	38.14 ± 2.28	36.65 ± 2.95	55.98 ± 2.66	MS/RI
A11	2,3,5,6-Tetramethylpyrazine	1124-11-4	1477	1478	1203.61 ± 27.40	1708.16 ± 106.25	1500.72 ± 53.53	1908.61 ± 67.39	MS/RI/O/S
A12	2-Ethyl-3,5,6-trimethylpyrazine	17398-16-2	1519	1491	87.79 ± 2.26	145.20 ± 11.15	131.96 ± 16.61	168.89 ± 9.76	MS/RI
A13	2-Isobutyl-3,5,6-trimethylpyrazine	46187-37-5	1595	1580	2.50 ± 0.13	ND	ND	ND	MS/RI
B	Alcohols								
B1	Methanethiol	74-93-1	-	675	2.50 ± 0.05	2.80 ± 0.47	3.27 ± 0.40	3.33 ± 0.16	MS/RI
B2	Glycidol	556-52-5	1285	1286	67.78 ± 13.66	56.21 ± 1.48	70.09 ± 3.37	52.72 ± 13.64	MS/RI
B3	2-Methyl-1-propanol	78-83-1	1089	1113	ND	ND	ND	0.52 ± 0.05	MS/RI
B4	3-Methylbut-3-en-1-ol	763-32-6	1245	1246	ND	ND	2.16 ± 0.02	4.09 ± 0.25	MS/RI
B5	1-Pentanol	71-41-0	1245	1241	4.52 ± 0.13	3.76 ± 0.37	4.38 ± 0.17	ND	MS/RI
B6	2-Heptanol	543-49-7	1315	1316	ND	2.81 ± 0.24	ND	ND	MS/RI
B7	1-Hexanol	111-27-3	1348	1348	169.51 ± 2.56	159.01 ± 11.09	172.45 ± 0.66	1425.37 ± 21.40	MS/RI
B8	(Z)-Hex-3-en-1-ol	928-96-1	1380	1377	ND	7.49 ± 0.38	8.38 ± 0.06	4.87 ± 0.07	MS/RI

No.	Aroma Compounds	CAS	RI ^a	RI ^b	Compound Content (µg /kg)				Identification method ^c
					BJ3-2	BJ3-2 <i>ΔilvA</i>	BJ3-2 <i>ΔserA</i>	BJ3-2 <i>ΔserAΔilvA</i>	
B9	(<i>E</i>)-Hex-3-en-1-ol	544-12-7	1380	1379	9.01±0.24	ND	ND	ND	MS/RI
B10	3-Octanol	589-98-0	1388	1385	12.48±0.54	10.75±0.46	12.12±0.37	9.43±0.45	MS/RI
B11	(<i>E</i>)-Hex-2-en-1-ol	928-95-0	1400	1400	3.71±0.09	3.27±0.13	3.73±0.09	1.95±0.21	MS/RI
B12	1-Octen-3-ol	3391-86-4	1439	1438	246.01±8.79	234.51±12.55	252.83±5.66	202.68±6.48	MS/RI/O/S
B13	2,6-Dimethylheptan-4-ol	108-82-7	1469	1509	110.78±2.95	100.78±8.73	111.92±5.49	105.07±2.57	MS/RI
B14	(2R,3R)-butane-2,3-diol	24347-58-8	1537	1544	1067.78±72.34	1007.39±87.16	875.73±103.18	544.27±34.56	MS/RI
B15	1-Octanol	111-87-5	1554	1556	ND	ND	ND	1.61±0.27	MS/RI
B16	6-Undecanol	23708-56-7	1648	1640	19.72±0.32	20.06±1.99	22.58±2.46	13.30±0.93	MS/RI
B17	3-Furanmethanol	4412-91-3	1653	1679	37.60±2.13	37.75±3.45	46.44±1.40	42.11±1.91	MS/RI/O
B18	3-Methylsulfanylpropan-1-ol	505-10-2	1714	1715	ND	1.94±0.42	ND	ND	MS/RI
B19	Benzyl alcohol	100-51-6	1874	1872	10.74±0.71	9.61±1.21	12.41±1.42	12.35±1.30	MS/RI
B20	Phenylethyl Alcohol	60-12-8	1913	1912	16.39±1.72	16.38±4.25	20.94±3.02	16.90±1.95	MS/RI
C	Ketones								
C1	Acetone	67-64-1	809	834	130.41±3.06	125.82±13.07	132.54±2.70	80.24±1.14	MS/RI/O/S
C2	2-Butanone	78-93-3	887	905	107.30±2.06	102.34±9.66	102.39±0.97	72.41±2.78	MS/RI
C3	3-Methylbutan-2-one	563-80-4	917	929	2.80±0.26	2.90±0.53	2.41±0.07	11.25±2.12	MS/RI
C4	2,3-Butanedione	431-03-8	960	963	1146.78±27.69	1349.14±29.86	1315.87±48.02	1092.93±21.19	MS/RI/O/S
C5	2,3-Pentanedione	600-14-6	1047	1050	ND	ND	6.30±0.71	4.83±0.53	MS/RI
C6	2,3-Hexanedione	3848-24-6	1121	1138	ND	ND	0.00±0.00	2.07±0.29	MS/RI
C7	2,5-dimethylhexan-3-one	1888-57-9	1142	1145	27.62±4.86	18.15±4.27	ND	ND	MS/RI
C8	2-methylheptan-3-one	13019-20-0	1147	1164	6.40±3.07	ND	ND	36.89±1.58	MS/RI
C9	2-Heptanone	110-43-0	1181	1180	10.69±1.73	13.34±2.14	11.35±0.19	6.19±1.92	MS/RI
C10	6-Methylheptan-2-one	928-68-7	1235	1237	ND	1.11±0.13	ND	ND	MS/RI
C11	3-Methylacetoin	115-22-0	1240	1243	4.36±0.38	5.21±0.84	ND	ND	MS/RI
C12	3-Octanone	106-68-3	1255	1254	19.54±4.66	16.44±3.65	20.09±1.68	18.86±2.14	MS/RI

No.	Aroma Compounds	CAS	RI ^a	RI ^b	Compound Content (µg /kg)				Identification method ^c
					BJ3-2	BJ3-2 <i>ΔilvA</i>	BJ3-2 <i>ΔserA</i>	BJ3-2 <i>ΔserAΔilvA</i>	
C13	Acetoin	513-86-0	1285	1286	1029.42 ± 56.82	1356.25 ± 47.91	1207.23 ± 17.81	800.73 ± 3.66	MS/RI
C14	1-Octen-3-one	4312-99-6	1301	1308	6.73 ± 0.35	6.00 ± 1.25	4.83 ± 0.22	3.98 ± 0.11	MS/RI
C15	2,3-Octanedione	585-25-1	1319	1325	9.90 ± 0.29	9.75 ± 0.15	11.29 ± 0.77	9.83 ± 0.69	MS/RI
C16	2-Hydroxy-3-pentanone	5704-20-1	1358	1361	23.43 ± 0.55	7.53 ± 1.29	22.68 ± 0.68	5.85 ± 0.15	MS/RI
C17	Acetoin acetate	4906-24-5	1375	1378	153.62 ± 1.58	172.77 ± 17.11	178.59 ± 6.85	98.55 ± 0.85	MS/RI
C18	Cyclotene	80-71-7	1830	1830	3.12 ± 0.29	2.73 ± 0.33	3.59 ± 0.32	ND	MS/RI
D	Acids								MS/RI
D1	Acetic acid	64-19-7	1434	1452	319.62 ± 47.70	265.01 ± 144.78	246.29 ± 68.37	356.43 ± 90.76	MS/RI
D2	2-Methylpropanoic acid	79-31-2	1562	1571	173.49 ± 7.10	250.44 ± 9.14	214.60 ± 20.38	334.44 ± 5.90	MS/RI
D3	2-Methylbutanoic acid	116-53-0	1661	1682	571.99 ± 46.18	527.32 ± 16.88	599.32 ± 38.31	735.05 ± 10.98	MS/RI/O/S
D4	4-Methylvaleric acid	646-07-1	1811	1800	ND	ND	ND	23.36 ± 1.23	MS/RI
D5	Malic acid	6915-15-7	-	-	161.09 ± 25.64	64.54 ± 4.16	86.44 ± 1.21	181.88 ± 29.60	MS/O
E	Aldehydes								MS/RI
E1	Propanal	123-38-6	779	783	1.06 ± 0.14	0.96 ± 0.02	0.95 ± 0.05	1.92 ± 0.22	MS/RI
E2	2-Propenal	107-02-8	834	828	1.04 ± 0.08	1.07 ± 0.13	1.28 ± 0.06	ND	MS/RI
E3	2-Methylpropanal	78-84-2	861	855	ND	0.33 ± 0.02	ND	ND	MS/RI
E4	2-Methylbutanal	96-17-3	901	903	12.73 ± 0.33	9.41 ± 1.29	13.44 ± 0.94	10.70 ± 0.63	MS/RI
E5	3-Methylbutanal	590-86-3	904	900	24.69 ± 1.21	17.98 ± 2.39	24.60 ± 1.56	21.61 ± 0.48	MS/RI
E6	2-Butenal	4170-30-3	1034	1038	7.80 ± 0.42	10.27 ± 0.40	9.52 ± 0.32	4.69 ± 0.42	MS/RI
E7	Hexanal	66-25-1	1075	1078	9.91 ± 4.95	9.74 ± 4.10	10.73 ± 2.20	4.13 ± 1.48	MS/RI
E8	(<i>E</i>)-2-Methylbut-2-enal	1115-11-3	1091	1093	22.13 ± 6.55	22.88 ± 4.19	17.91 ± 3.43	10.61 ± 5.00	MS/RI
E9	2-Ethyl-2-hexenal	645-62-5	1336	1330	1.76 ± 0.75	ND	8.92 ± 6.67	ND	MS/RI
E10	Nonanal	124-19-6	1392	1390	ND	2.08 ± 0.60	ND	4.87 ± 2.02	MS/RI
E11	3-Furaldehyde	498-60-2	1457	1455	8.42 ± 0.25	7.53 ± 0.70	9.20 ± 0.19	5.86 ± 0.52	MS/RI
E12	Benzaldehyde	100-52-7	1524	1529	210.21 ± 4.03	162.21 ± 4.38	240.49 ± 8.72	215.67 ± 9.19	MS/RI

No.	Aroma Compounds	CAS	RI ^a	RI ^b	Compound Content (µg /kg)				Identification method ^c
					BJ3-2	BJ3-2 <i>ΔilvA</i>	BJ3-2 <i>ΔserA</i>	BJ3-2 <i>ΔserAΔilvA</i>	
E13	2-Phenylcrotonaldehyde	4411-89-6	1936	1922	1.93±0.11	1.79±0.06	2.62±0.23	2.63±0.25	MS/RI
E14	1H-Pyrrole-2-carbaldehyde	1003-29-8	2023	2028	3.62±0.37	3.09±0.54	4.05±0.24	4.86±0.49	MS/RI
F	phenols								MS/RI
F1	2-Methoxy-5-methylphenol	1195-09-1	1747	1789	3.80±0.27	8.34±1.86	7.65±1.40	ND	MS/RI
F2	Guaiacol	32994	1857	1859	69.51±1.20	84.10±5.56	96.15±9.46	117.88±8.70	MS/RI/O/S
F3	Phenol	108-95-2	1996	2000	73.65±2.50	56.08±5.97	82.77±6.11	84.20±6.37	MS/RI
G	Esters								
G1	Methyl ethanoate	79-20-9	820	839	13.93±0.25	16.42±0.93	17.30±3.47	9.47±1.04	MS/RI
G2	Ethyl Acetate	141-78-6	872	889	0.85±0.08	0.89±0.07	0.89±0.06	ND	MS/RI
G3	Methyl thiolacetate	1534-08-3	1040	1041	ND	3.13±1.67	ND	ND	MS/RI
G4	Hexyl acetate	142-92-7	1272	1275	ND	3.57±0.37	5.24±1.07	2.25±0.57	MS/RI
G5	Methylbenzoate	93-58-3	1626	1631	ND	ND	ND	1.03±0.10	MS/RI
G6	4-Hexanolide	695-06-7	1705	1696	6.34±0.12	5.37±0.74	7.34±0.59	ND	MS/RI
G7	(S)-Ethyl 2-hydroxy-2-phenylacetate	13704-09-1	-	-	ND	ND	2.44±0.63	ND	MS
H	Furan								MS/RI
H1	Furan	110-00-9	786	797	ND	ND	0.29±0.01	ND	MS/RI
H2	3-Methylfuran	930-27-8	856	851	0.63±0.04	0.64±0.09	0.71±0.03	0.32±0.11	MS/RI
H3	2-Ethylfuran	3208-16-0	938	949	17.13±2.10	17.11±3.30	15.24±2.67	4.06±0.95	MS/RI
H4	2-Ethyl-5-methylfuran	1703-52-2	1023	1018	0.71±0.09	0.65±0.38	0.66±0.08	ND	MS/RI
H5	2-n-Butyl furan	4466-24-4	1133	1123	ND	ND	1.04±0.17	ND	MS/RI
H6	2-Pentylfuran	3777-69-3	1227	1228	13.34±11.59	25.70±8.88	13.93±0.85	15.48±2.64	MS/RI
I	Others								
I1	1,4-Pentadiene	591-93-5	-	-	ND	ND	ND	0.19±0.07	MS
I2	Carbon disulfide	75-15-0	-	-	ND	ND	ND	0.91±0.20	MS/RI
I3	2,4,5-Trimethyl-1,3-dioxolane	3299-32-9	929	967	ND	0.88±0.10	ND	ND	MS/RI
I4	Acetonitrile	27522	988	1003	1.87±0.06	3.19±0.26	2.27±0.13	2.35±0.19	MS/RI
I5	Toluene	108-88-3	1033	1037	ND	3.99±0.37	ND	2.18±0.28	MS/RI

No.	Aroma Compounds	CAS	RI ^a	RI ^b	Compound Content (µg /kg)				Identification method ^c
					BJ3-2	BJ3-2 Δ <i>ilvA</i>	BJ3-2 Δ <i>serA</i>	BJ3-2 Δ <i>serA</i> Δ <i>ilvA</i>	
I6	Dimethyl disulfide	624-92-0	1065	1085	1.79±0.17	1.49±0.17	1.63±0.33	1.73±0.20	MS/RI
I7	1,3-Dimethylbenzene	108-38-3	1135	1138	0.67±0.24	ND	ND	ND	MS/RI
I8	Pyridine	110-86-1	1191	1191	ND	ND	2.62±0.14	1.87±0.56	MS/RI
I9	2,4,5-trimethyloxazole	20662-84-4	1198	1200	54.35±8.53	131.74±11.65	81.32±2.53	56.49±1.79	MS/RI/O/S
I10	Pyrazinamide	98-96-4	1711	1740	9.20±0.51	5.32±0.58	8.79±0.73	6.69±0.50	MS/RI
I11	1-(1H-Pyrrol-2-yl)-ethanone	1072-83-9	1971	1971	1.69±0.17	1.38±0.29	1.89±0.16	2.68±0.34	MS/RI
I12	Unknown1	Unknown1	-	-	ND	1.68±0.00	ND	ND	MS
I13	unknown2	unknown2	-	-	140.42±19.98	64.67±31.18	103.88±11.41	99.60±18.80	MS

a: Retention indices were obtained from the flavornet database (<https://webbook.nist.gov/chemistry/>).

b: Retention index calculated of compounds on DB-WAX Column (60 m x 0.25 mm x 0.25 µm) with a homologous series of n-alkanes (C7-C30).

c: Identification methods: MS, RI, O and S represent being identifying by NIST 20 mass spectral database, linear retention indices reported in the species database (<http://webbook.nist.gov/chemistry/name-ser.html>) and literature, olfactometry, and standard chemical, respectively.

ND: Not detected

Table S5. rOAVs of the odor-active substances (rOAV>1) in four samples

No. ^a	Compounds	Threshold ^b (µg /kg)	rOAV			
			BJ3-2	BJ3-2 $\Delta ilvA$	BJ3-2 $\Delta serA$	BJ3-2 $\Delta serA \Delta ilvA$
E4	2-Methylbutanal	1	12.73	9.41	13.44	10.70
H3	2-Ethylfuran	2.3	7.45	7.44	6.62	1.76
C4	2,3-Butanedione	3	382.26	449.71	438.62	364.31
I6	Dimethyl disulfide	0.06	29.79	24.90	27.16	28.77
E7	Hexanal	10	0.99	0.97	1.07	0.41
I9	2,4,5-trimethyl-1,3-oxazole	5	10.87	26.35	16.26	11.30
H6	2-Pentylfuran	4.8	2.78	5.35	2.90	3.23
C13	Acetoin	259	3.97	5.24	4.66	3.09
A3	2,5-Dimethylpyrazine	20	55.31	41.73	55.40	71.27
B7	1-Hexanol	700	0.24	0.23	0.25	2.04
A5	2,3-Dimethylpyrazine	100	0.77	0.87	0.86	1.13
E10	Nonanal	3.5	0.00	0.59	0.00	1.39
A8	2,3,5-Trimethylpyrazine	10	123.63	129.15	127.51	141.68
B12	1-Octen-3-ol	7	35.14	33.50	36.12	28.95
A9	3-Ethyl-2,5-dimethylpyrazine	25	2.33	1.83	2.57	3.16
A11	2,3,5,6-Tetramethylpyrazine	200	6.02	8.54	7.50	9.54
F2	Guaiacol	0.17	408.89	494.69	565.58	693.43
D5	Malic acid	64	2.52	1.01	1.35	2.84
D3	2-Methylbutanoic acid	520	1.10	1.01	1.15	1.41

a: The numbers assigned to the compounds are in line with those specified in TableS1.

b: Odor thresholds were referenced from the book (Odor thresholds compilations of odor threshold values in air, water and other media) and a literature.

Table S6. Odor intensity of the odorants in four samples identified using GC-O

No. ^a	Compounds	GC-O			
		BJ3-2	BJ3-2 $\Delta ilvA$	BJ3-2 $\Delta serA$	BJ3-2 $\Delta serA \Delta ilvA$
D3	2-Methylbutanoic acid	3	3	3	4
A11	2,3,5,6-Tetramethylpyrazine	2	2.5	2.3	3
D5	Malic acid	3	2	2	3
A8	2,3,5-Trimethylpyrazine	3	2	3	4
A3	2,5-Dimethylpyrazine	3.1	2	3	4
A9	3-Ethyl-2,5-dimethylpyrazine	2	2	2	3
F2	Guaiacol	2.3	2	3	4
C4	2,3-Butanedione	2	3	3	2
A10	5-Ethyl-2,3-dimethylpyrazine	2	2	2	2.8
A5	2,3-Dimethylpyrazine	2	2	2	3
C13	Acetoin	2	3	3	2
D2	2-Methylpropanoic acid	2	2	2	3
B12	1-Octen-3-ol	2	2	2	2
B17	3-Furanmethanol	2	2	2	2
A4	2,6-Dimethylpyrazine	1	1	1	2
I9	2,4,5-trimethyl-1,3-oxazole	1	3	1	1
A6	2-Methyl-5-ethylpyrazine	1	1	1	1

a: The numbers assigned to the compounds are in line with those specified in TableS1.