

**Table S3** The content ( $\mu\text{g}/\text{kg}$ ) of volatile flavor compounds in simulated fermentation broth of different *Saccharomyces cerevisiae* strains.

Number	Substance <sup>a</sup>	RI		SC-Y11	SC-ZB120	SC-L1225	SC-2	SC-NL8	SC-NL9	SC-TC10	SC-422	SC-NL25
		Calculation	Reference									
1	ethyl acetate	881	878	176.42 $\pm$ 17.27	95.63 $\pm$ 20.05	132.91 $\pm$ 21.03	173.19 $\pm$ 3.29	158.84 $\pm$ 21.80	205.34 $\pm$ 15.94	184.82 $\pm$ 16.90	163.63 $\pm$ 10.12	170.71 $\pm$ 4.16
2	isobutyl alcohol	1085	1097	286.31 $\pm$ 21.16	259.92 $\pm$ 40.74	247.94 $\pm$ 8.30	300.82 $\pm$ 30.06	276.78 $\pm$ 13.07	243.91 $\pm$ 19.21	330.78 $\pm$ 41.16	295.15 $\pm$ 21.73	205.57 $\pm$ 33.24
3	butanol	1148	1146	- <sup>b</sup>	-	-	-	-	-	-	-	-
4	3-methyl-1-butanol	1202	1206	5520.77 $\pm$ 628.69	4058.60 $\pm$ 502.41	3365.34 $\pm$ 338.41	5072.95 $\pm$ 429.96	4126.89 $\pm$ 480.11	4729.81 $\pm$ 176.59	4807.28 $\pm$ 621.95	4493.57 $\pm$ 319.66	3410.16 $\pm$ 512.73
5	ethyl acetate	1230	1244	52.44 $\pm$ 11.32	- <sup>b</sup>	56.15 $\pm$ 7.62	-	34.40 $\pm$ 1.29	17.03 $\pm$ 2.01	59.14 $\pm$ 4.55	26.21 $\pm$ 7.28	-
6	styrene	1258	1264	27.18 $\pm$ 3.02	46.94 $\pm$ 3.37	75.58 $\pm$ 9.80	34.86 $\pm$ 0.63	50.02 $\pm$ 4.00	-	-	40.08 $\pm$ 9.77	-
7	2-octanone	1282	1296	470.46 $\pm$ 61.15	506.55 $\pm$ 22.99	473.99 $\pm$ 38.22	534.93 $\pm$ 1.21	520.36 $\pm$ 15.65	545.17 $\pm$ 36.93	520.30 $\pm$ 7.47	526.26 $\pm$ 10.70	530.98 $\pm$ 34.38
8	ethyl caprylate	1430	1445	421.71 $\pm$ 20.18	110.33 $\pm$ 28.16	294.53 $\pm$ 18.18	247.45 $\pm$ 20.07	393.99 $\pm$ 3.41	200.16 $\pm$ 28.56	385.95 $\pm$ 53.96	317.30 $\pm$ 44.98	75.26 $\pm$ 2.57
9	acetic acid	1454	1454	833.76 $\pm$ 16.95	856.10 $\pm$ 59.26	707.59 $\pm$ 42.06	629.49 $\pm$ 16.03	917.91 $\pm$ 89.30	613.10 $\pm$ 38.80	562.01 $\pm$ 79.62	811.15 $\pm$ 70.60	484.49 $\pm$ 7.77
10	Furfural	1467	1478	92.46 $\pm$ 7.40	100.00 $\pm$ 16.25	-	-	75.64 $\pm$ 5.41	-	-	-	-
11	benzaldehyde	1524	1530	77.02 $\pm$ 8.18	65.91 $\pm$ 0.49	-	74.74 $\pm$ 7.15	-	53.52 $\pm$ 10.69	112.30 $\pm$ 13.97	60.45 $\pm$ 3.28	33.03 $\pm$ 5.81
12	ethyl caprate	1633	1645	614.92 $\pm$ 83.40	-	135.99 $\pm$ 13.70	226.28 $\pm$ 14.83	381.60 $\pm$ 22.67	-	406.82 $\pm$ 12.40	307.72 $\pm$ 14.17	-
13	phenethyl acetate	1806	1827	397.52 $\pm$ 15.59	218.99 $\pm$ 22.84	437.24 $\pm$ 59.30	252.84 $\pm$ 6.17	293.05 $\pm$ 8.71	720.38 $\pm$ 79.30	307.19 $\pm$ 66.44	629.33 $\pm$ 71.31	290.17 $\pm$ 37.31
14	ethyl laurate	1830	1839	208.47 $\pm$ 17.74	-	83.70 $\pm$ 22.75	-	144.99 $\pm$ 9.81	-	142.99 $\pm$ 24.47	-	-
15	hexanoic acid	1845	1831	-	-	59.95 $\pm$ 1.48	-	62.77 $\pm$ 14.40	-	85.02 $\pm$ 2.59	-	-
16	phenethyl alcohol	1911	1924	12526.28 $\pm$ 1127.46	7381.98 $\pm$ 897.95	7487.67 $\pm$ 372.49	9670.38 $\pm$ 96.46	7720.53 $\pm$ 881.81	19737.17 $\pm$ 529.88	7627.33 $\pm$ 396.76	10740.39 $\pm$ 1033.97	9616.74 $\pm$ 1196.85
17	Methyl maltol	1966	1968	119.26 $\pm$ 16.16	110.99 $\pm$ 7.85	66.67 $\pm$ 2.70	88.41 $\pm$ 7.27	142.80 $\pm$ 11.95	129.12 $\pm$ 19.37	46.85 $\pm$ 2.09	152.89 $\pm$ 8.48	94.80 $\pm$ 6.75
18	phenol	2009	2011	77.39 $\pm$ 9.62	73.89 $\pm$ 11.43	29.87 $\pm$ 1.76	78.88 $\pm$ 9.35	82.22 $\pm$ 14.07	146.68 $\pm$ 26.29	113.79 $\pm$ 33.56	155.97 $\pm$ 5.46	93.69 $\pm$ 8.91
19	octanoic acid	2058	2063	1861.19 $\pm$ 217.27	698.30 $\pm$ 98.05	1351.91 $\pm$ 77.30	920.83 $\pm$ 48.98	2476.31 $\pm$ 141.93	997.40 $\pm$ 144.70	2147.42 $\pm$ 295.72	1941.01 $\pm$ 36.27	247.92 $\pm$ 34.81
20	triacetin	2076	2077	-	-	-	-	-	792.93 $\pm$ 68.26	1028.69 $\pm$ 191.65	436.03 $\pm$ 64.42	203.56 $\pm$ 36.08
21	hexanoic acid 2-phenylethyl ester	2169	2164	232.28 $\pm$ 10.23	-	165.00 $\pm$ 4.55	-	-	302.67 $\pm$ 33.36	-	-	-
22	benzoic acid	2176	2448	494.73 $\pm$ 3.24	271.02 $\pm$ 48.56	384.39 $\pm$ 0.74	453.65 $\pm$ 37.81	224.49 $\pm$ 15.75	300.93 $\pm$ 45.41	330.16 $\pm$ 36.18	300.54 $\pm$ 48.27	179.28 $\pm$ 33.39
23	4-vinyl-2-methoxyphenol	2201	2217	1584.68 $\pm$ 190.03	-	179.85 $\pm$ 26.94	717.38 $\pm$ 56.71	126.85 $\pm$ 23.94	1120.60 $\pm$ 161.69	1302.74 $\pm$ 262.30	168.16 $\pm$ 28.87	53.80 $\pm$ 6.74

<sup>a</sup>Aroma compounds found in *Huangjiu* at different fermentation stages.<sup>b</sup>Not detect.