

Supplementary Materials:

Figure S1. Comparative fermentation analyses of KOK hybrids and their spore clones and their parental strains fermented in 10° Plato wort. (A,B) Fermentation curves of GYBC 885-derived spore clones. (C,D) Fermentation curves of GYBC 886-derived spore clones. The ANKOM Rf Gas Production system was used to detect the cumulative pressure. Data shown are the mean of three independent experiments $\pm$ SEM (except for GYBC 902 n=4).

Figure S2. Fermentation analyses of the KOK hybrids, the wine yeast GYBC 142 as a control and of the KOK spore clones compared to their parental strains fermented in Riesling must. (A,B) Fermentation curves of GYBC 885-derived spore clones. (C,D) Fermentation curves of GYBC 886-derived spore clones. The mass loss of CO₂ was measured daily to generate the cumulative loss of CO₂. Data shown are the mean of three independent experiments $\pm$ SEM (except for GYBC 263 n=5 and GYBC 126 n=6).

Table S1. Residual sugars and total ethanol concentrations at the end of fermentations with KOK hybrids, all of the spore clones as well as their parental strains using 10° Plato wort.

Table S2. Residual sugars; organic acids and total ethanol concentration at the end of Riesling must fermentations with KOK hybrids; the wine yeast GYBC 142 as control; the spore clones; and their parental strains.

Table S3. Aroma analysis of green beers at the end of fermentations with KOK hybrids, all of the spore clones, their parental strains as well as lager and ale control strains using 10° Plato wort.

Table S4. Aroma analysis of Riesling wines at the end of fermentations with KOK hybrids, all of the spore clones, their parental strains as well as GHM control strain.

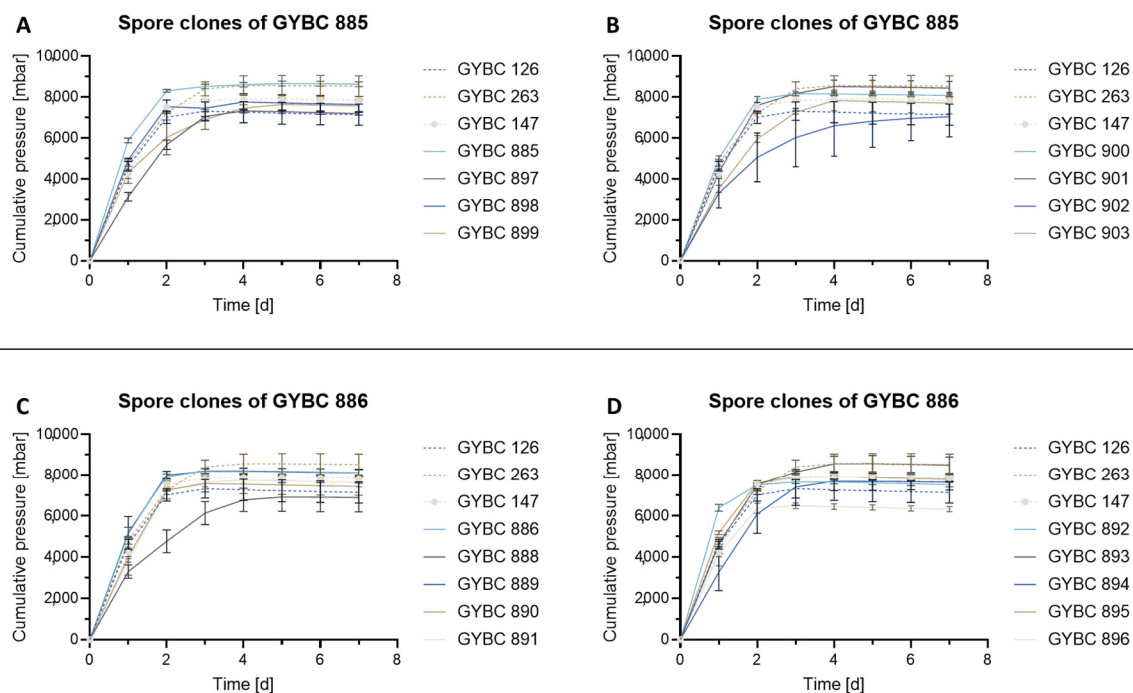


Figure S1. Comparative fermentation analyses of KOK hybrids and their spore clones and their parental strains fermented in 10° Plato wort. (A,B) Fermentation curves of GYBC 885-derived spore clones. (C,D) Fermentation curves of GYBC 886-derived spore clones. The ANKOM Rf Gas Production system was used to detect the cumulative pressure. Data shown are the mean of three independent experiments $\pm$ SEM (except for GYBC 902 n=4).

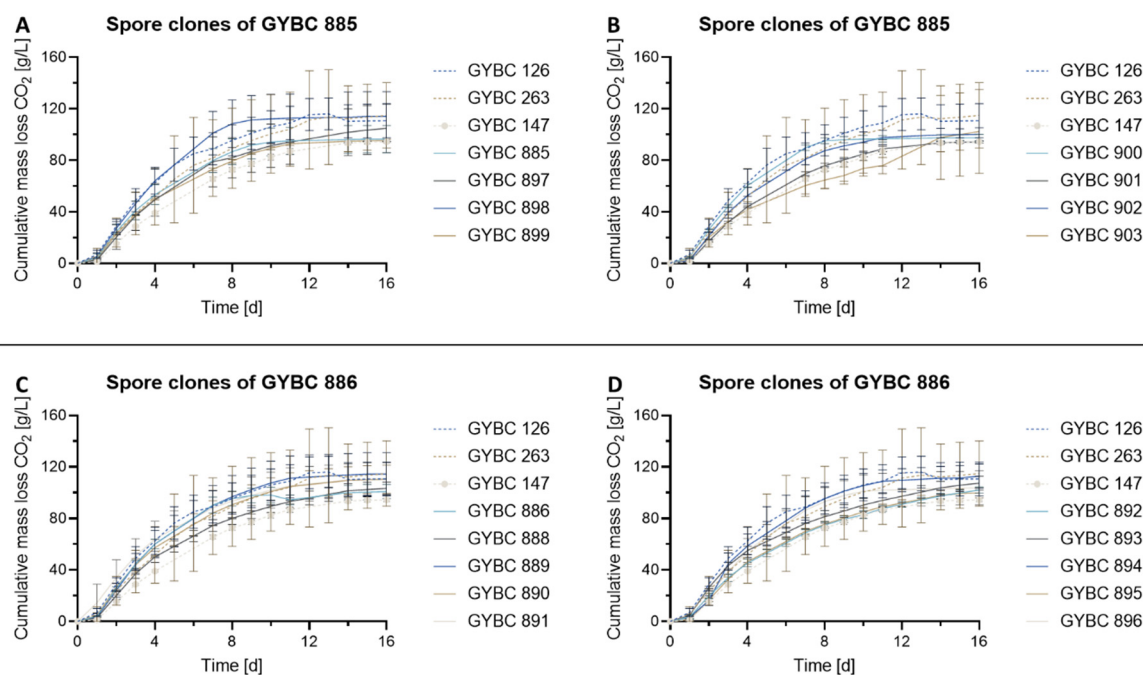


Figure S2. Fermentation analyses of the KOK hybrids, the wine yeast GYBC 142 as a control and of the KOK spore clones compared to their parental strains fermented in Riesling must. (A,B) Fermentation curves of GYBC 885-derived spore clones. (C,D) Fermentation curves of GYBC 886-derived spore clones. The mass loss of CO₂ was measured daily to generate the cumulative loss of CO₂. Data shown are the mean of three independent experiments $\pm$ SEM (except for GYBC 263 n=5 and GYBC 126 n=6).

Table S1. Residual sugars and total ethanol concentrations at the end of fermentations with KOK hybrids, all of the spore clones as well as their parental strains using 10° Plato wort.

	Strain	Glucose [g/L]	Maltose [g/L]	Maltotriose [g/L]	Ethanol [g/L]	Ethanol [%]
<i>Oppenheimer</i>	GYBC 126	< 1.00	< 1.00	< 1.00	34.70 ± 0.46	4.53 ± 0.06
<i>Kreuz 1894</i>						
<i>Freya</i>	GYBC 147	< 1.00	< 1.00	< 1.00	35.13 ± 0.76	4.43 ± 0.12
	GYBC 263	< 1.00	< 1.00	< 1.00	37.80 ± 1.93	4.77 ± 0.25
<i>Zygotes</i>	GYBC 885	< 1.00	< 1.00	< 1.00	37.50 ± 0.40	4.73 ± 0.06
	GYBC 886	< 1.00	< 1.00	< 1.00	39.27 ± 0.31•	4.97 ± 0.06•
<i>Spore clones</i>	GYBC 888	< 1.00	< 1.00	< 1.00	37.67 ± 0.84	4.77 ± 0.06
	GYBC 889	< 1.00	< 1.00	< 1.00	36.50 ± 0.36	4.63 ± 0.06
	GYBC 890	< 1.00	< 1.00	< 1.00	34.57 ± 0.23	4.37 ± 0.06
	GYBC 891	< 1.00	< 1.00	< 1.00	32.93 ± 0.06	4.20 ± 0.00
	GYBC 892	< 1.00	< 1.00	< 1.00	31.83 ± 0.55•	4.03 ± 0.06•
	GYBC 893	< 1.00	< 1.00	< 1.00	38.87 ± 0.46•	4.93 ± 0.06•
	GYBC 894	< 1.00	< 1.00	< 1.00	36.10 ± 1.74	4.57 ± 0.21
	GYBC 895	< 1.00	< 1.00	< 1.00	32.43 ± 0.31•	4.10 ± 0.00
	GYBC 896	< 1.00	< 1.00	8.09 ± 0.13•□	29.07 ± 0.40•	3.67 ± 0.06•
	GYBC 897	< 1.00	< 1.00	< 1.00	35.70 ± 0.70	4.50 ± 0.10
	GYBC 898	< 1.00	< 1.00	< 1.00	33.30 ± 1.31	4.20 ± 0.17
	GYBC 899	< 1.00	< 1.00	< 1.00	34.50 ± 1.02	4.37 ± 0.15
	GYBC 900	< 1.00	< 1.00	< 1.00	35.40 ± 0.27	4.47 ± 0.06
	GYBC 901	< 1.00	< 1.00	< 1.00	37.03 ± 0.31	4.70 ± 0.00
	GYBC 902	< 1.00	< 1.00	< 1.00	36.45 ± 1.53	4.60 ± 0.18
	GYBC 903	< 1.00	< 1.00	< 1.00	34.90 ± 0.10	4.40 ± 0.00

Results are presented as the mean ± SD of three biological replicates (except for GYBC 902 n=4). Significant differences in sugar degradation and ethanol formation between the spore clones and their respective parental strains were determined using a classical ANOVA, including a homogeneity test with Welch's correction and a Post Hoc test using the Games-Howell-test, $p < 0.05$ as compared to the control (• = GYBC 126; □ = GYBC 263).

Table S2. Residual sugars, organic acids and total ethanol concentration at the end of Riesling must fermentations with KOK hybrids, the wine yeast GYBC 142 as control, the spore clones as well as their parental strains.

	Strain	Glucose [g/L]	Fructose [g/L]	Tartaric acid [g/L]	Malic acid [g/L]	Acetic acid [g/L]	Citric acid [g/L]	Ethanol [g/L]	Ethanol [%]
GHM	GYBC 142	< 1.00	< 1.00	2.85 ± 0.03	3.88 ± 0.08	0.21 ± 0.02	0.26 ± 0.05	91.80 ± 1.18	11.63 ± 0.15
<i>Oppenheimer</i> <i>Kreuz 1894</i>	GYBC 126	< 1.00	< 1.00	2.90 ± 0.05	2.41 ± 0.15	0.37 ± 0.02	0.21 ± 0.04	95.30 ± 0.90	12.07 ± 0.11
<i>Freya</i>	GYBC 147	< 1.00	< 1.00	3.07 ± 0.03	4.28 ± 0.05	0.27 ± 0.03	0.22 ± 0.02	93.94 ± 0.85	11.90 ± 0.11
	GYBC 263	< 1.00	< 1.00	2.94 ± 0.03	3.08 ± 0.07	0.63 ± 0.26	0.21 ± 0.02	94.32 ± 1.65	11.95 ± 0.21
Zygotes	GYBC 885	< 1.00	< 1.00	2.87 ± 0.04	2.60 ± 0.13	0.41 ± 0.02	0.24 ± 0.03	93.26 ± 1.67	11.82 ± 0.22
	GYBC 886	< 1.00	< 1.00	2.96 ± 0.04	2.52 ± 0.04□	0.84 ± 0.58	0.21 ± 0.02	94.36 ± 1.01	11.95 ± 0.13
Spore clones	GYBC 888	< 1.00	< 1.00	3.01 ± 0.03•	3.23 ± 0.07•	0.53 ± 0.10	0.20 ± 0.02	92.65 ± 1.41	11.74 ± 0.18
	GYBC 889	< 1.00	< 1.00	2.89 ± 0.07	2.75 ± 0.09□	0.41 ± 0.02	0.22 ± 0.03	93.48 ± 1.67	11.85 ± 0.21
	GYBC 890	< 1.00	< 1.00	2.92 ± 0.02	2.39 ± 0.03□	0.60 ± 0.02•	0.19 ± 0.01	93.23 ± 0.20•	11.81 ± 0.03
	GYBC 891	< 1.00	< 1.00	2.98 ± 0.05	2.96 ± 0.08•	0.45 ± 0.00•	0.20 ± 0.01	94.59 ± 1.39	11.99 ± 0.18
	GYBC 892	< 1.00	< 1.00	2.92 ± 0.02	2.78 ± 0.04□	0.49 ± 0.01•	0.19 ± 0.01	94.78 ± 0.51	12.01 ± 0.06
	GYBC 893	< 1.00	< 1.00	2.97 ± 0.02•	2.85 ± 0.05•	0.47 ± 0.02•	0.21 ± 0.02	94.43 ± 0.85	11.97 ± 0.11
	GYBC 894	< 1.00	< 1.00	2.91 ± 0.03	2.68 ± 0.20	0.38 ± 0.09	0.22 ± 0.02	94.21 ± 0.44	11.93 ± 0.06
	GYBC 895	< 1.00	< 1.00	2.96 ± 0.02	2.95 ± 0.06•	0.44 ± 0.03	0.21 ± 0.02	94.26 ± 0.34	11.94 ± 0.05
	GYBC 896	< 1.00	< 1.00	2.90 ± 0.03	2.44 ± 0.07□	0.42 ± 0.02	0.19 ± 0.01	92.06 ± 0.48•	11.66 ± 0.06•
	GYBC 897	< 1.00	< 1.00	3.03 ± 0.01•	3.30 ± 0.06•	0.58 ± 0.06	0.19 ± 0.00	95.04 ± 0.55	12.04 ± 0.07
	GYBC 898	< 1.00	< 1.00	2.95 ± 0.02	2.59 ± 0.11□	0.41 ± 0.08	0.28 ± 0.05	93.70 ± 0.68	11.87 ± 0.09
	GYBC 899	< 1.00	< 1.00	2.96 ± 0.02	3.45 ± 0.04•□	0.45 ± 0.02•	0.20 ± 0.03	96.13 ± 0.19	12.18 ± 0.03
	GYBC 900	< 1.00	< 1.00	2.99 ± 0.01•	2.98 ± 0.06•	0.42 ± 0.03	0.23 ± 0.05	94.95 ± 1.01	12.03 ± 0.13
	GYBC 901	< 1.00	< 1.00	3.07 ± 0.03	2.99 ± 0.13•	0.51 ± 0.04	0.28 ± 0.10	93.63 ± 0.70	11.86 ± 0.09
	GYBC 902	< 1.00	< 1.00	2.92 ± 0.01	2.88 ± 0.17	0.70 ± 0.67	0.22 ± 0.08	95.38 ± 2.08	12.08 ± 0.26
	GYBC 903	< 1.00	18.14 ± 4.12	3.05 ± 0.01	3.34 ± 0.02•	0.75 ± 0.01•	0.18 ± 0.03	86.43 ± 1.93	10.95 ± 0.24

Results are presented as the mean ± SD of three biological replicates (except for GYBC 263 n=5 and GYBC 126 n=6). Significant differences in sugar degradation and ethanol formation between the spore clones and their respective parental strains were determined using a classical ANOVA, including a homogeneity test with Welch's correction and a Post Hoc test using the Games-Howell-test, $p < 0.05$ as compared to the control (• = GYBC 126; □ = GYBC 263).

Table S3. Aroma analysis of green beers at the end of fermentations with KOK hybrids, all of the spore clones, their parental strains as well as lager and ale control strains using 10° Plato wort.

	Strain	Malty/sweet [OAV]	Fruity/floral [OAV]	Fresh [OAV]	Spicy/yeasty [OAV]	Wood/dried fruit [OAV]
<i>Oppenheimer Kreuz 1894</i>	GYBC 126	10.54 ± 0.31	0.58 ± 0.06	0.62 ± 0.03	3.66 ± 0.07	nq
<i>Freya</i>	GYBC 147	21.55 ± 1.55	0.93 ± 0.14	0.66 ± 0.09	5.42 ± 0.41	nq
	GYBC 263	17.28 ± 1.94	1.57 ± 0.46	0.52 ± 0.23	3.60 ± 0.22	nq
<i>Zygotes</i>	GYBC 885	15.49 ± 3.22	1.34 ± 0.45	1.33 ± 0.08•	7.66 ± 0.30•□	0.88 ± 0.24
	GYBC 886	24.41 ± 1.29•	1.19 ± 0.18	1.07 ± 0.25	7.17 ± 0.51•□	0.80 ± 0.13
<i>Spore clones</i>	GYBC 888	21.51 ± 5.84	1.55 ± 0.51	0.34 ± 0.05•	4.31 ± 0.11•	nq
	GYBC 889	9.75 ± 0.46	0.72 ± 0.04	0.46 ± 0.04	3.09 ± 0.09•	nq
	GYBC 890	11.13 ± 1.12	0.18 ± 0.03•	0.57 ± 0.04	4.02 ± 0.27	nq
	GYBC 891	13.61 ± 0.95	0.86 ± 0.04	0.61 ± 0.04	4.69 ± 0.28	nq
	GYBC 892	11.39 ± 1.04	0.76 ± 0.20	0.76 ± 0.07	4.95 ± 0.66	nq
	GYBC 893	18.24 ± 0.65•	0.89 ± 0.02	0.47 ± 0.04	4.24 ± 0.14	nq
	GYBC 894	13.17 ± 2.73	1.33 ± 0.33	0.39 ± 0.14	3.56 ± 0.71	nq
	GYBC 895	11.35 ± 0.61	0.67 ± 0.05	0.58 ± 0.05	4.32 ± 0.27	0.17 ± 0.05
	GYBC 896	13.27 ± 0.97	0.65 ± 0.05	0.53 ± 0.11	3.84 ± 0.30	nq
	GYBC 897	14.59 ± 0.26•	1.58 ± 0.02•	0.72 ± 0.05	6.13 ± 0.18•□	nq
	GYBC 898	11.76 ± 1.23	0.75 ± 0.01	1.07 ± 0.12	4.96 ± 0.20•□	nq
	GYBC 899	27.80 ± 2.72	2.26 ± 0.22•	0.99 ± 0.25	7.53 ± 0.32•□	1.56 ± 0.27
	GYBC 900	12.16 ± 0.63	0.52 ± 0.02	0.69 ± 0.04	3.52 ± 0.08	nq
	GYBC 901	14.30 ± 0.24•	0.66 ± 0.05	0.79 ± 0.06	4.35 ± 0.12•	nq
	GYBC 902	11.22 ± 2.71	1.11 ± 0.34	0.33 ± 0.12	2.25 ± 0.20•□	0.06 ± 0.02
	GYBC 903	12.04 ± 0.44	0.89 ± 0.10	0.45 ± 0.05	3.49 ± 0.10	nq
<i>Lager yeast</i>	G024	34.83 ± 0.51	0.02 ± 0.01	0.24 ± 0.01	2.10 ± 0.03	0.26 ± 0.07
	GYBC 111	52.12 ± 7.38	0.12 ± 0.04	0.17 ± 0.01	1.55 ± 0.04	0.10 ± 0.05
	GYBC 112	22.90 ± 0.20	0.27 ± 0.03	0.24 ± 0.01	2.16 ± 0.04	0.05 ± 0.02
	GYBC 113	23.39 ± 1.75	0.22 ± 0.03	0.24 ± 0.01	2.10 ± 0.21	0.16 ± 0.15
	GYBC 114	29.85 ± 1.31	0.25 ± 0.06	0.25 ± 0.01	1.91 ± 0.11	0.31 ± 0.03
	GYBC 115	30.78 ± 1.90	0.16 ± 0.03	0.22 ± 0.02	2.27 ± 0.06	0.04 ± 0.07
	GYBC 116	20.90 ± 1.02	0.21 ± 0.04	0.24 ± 0.01	2.04 ± 0.04	0.13 ± 0.12
	GYBC 117	12.39 ± 1.36	0.12 ± 0.03	0.22 ± 0.02	1.91 ± 0.04	0.12 ± 0.09
<i>Ale yeast</i>	GYBC 118	32.32 ± 0.78	0.22 ± 0.03	0.32 ± 0.01	2.80 ± 0.02	nq
	GYBC 119	39.37 ± 0.55	0.32 ± 0.02	0.45 ± 0.02	3.40 ± 0.13	0.00 ± 0.01
	GYBC 120	21.86 ± 3.42	0.44 ± 0.15	0.45 ± 0.06	3.22 ± 0.73	0.04 ± 0.06
	GYBC 121	13.83 ± 0.95	0.50 ± 0.04	0.33 ± 0.03	3.52 ± 0.17	nq
	GYBC 122	18.61 ± 0.96	0.15 ± 0.02	0.50 ± 0.02	3.19 ± 0.14	0.19 ± 0.06
	GYBC 123	9.38 ± 0.35	0.25 ± 0.02	0.57 ± 0.01	3.41 ± 0.07	0.18 ± 0.14
	GYBC 124	10.45 ± 1.07	0.28 ± 0.03	0.35 ± 0.01	2.87 ± 0.14	0.01 ± 0.02
	GYBC 125	27.54 ± 1.16	0.46 ± 0.07	0.34 ± 0.01	3.27 ± 0.16	0.26 ± 0.10

nq = not quantifiable

The beer flavors analyzed were malty/sweet [OAV] (sum of ethyl acetate, ethyl propionate, ethyl isobutyrate, ethyl butyrate, ethyl lactate), spicy/yeasty [OAV] (sum of isoamyl alcohol, amylalcohol, isobutanol, 2-phenylethanol), wood/dried fruit [OAV] (sum of diethyl succinate, ethyl octanoate, ethyl decanoate), fruity/floral [OAV] (sum of isoamyl acetate, amyl acetate, hexyl acetate, 2-phenylethyl acetate, ethyl acetate) and fresh [OAV] (sum of hexyl acetate, ethyl hexanoate, 2-phenylethanol). Results are presented as the mean ± SD of three biological replicates (except for GYBC 902 n=4). Significant differences in flavor formation between the spore clones and their respective parental strains were determined using a classical ANOVA, including a homogeneity test with Welch's correction and a Post Hoc test using the Games-

Howell-test, $p < 0.05$ as compared to the respective control (• = GYBC 126; □ = GYBC 263). The odor activity value (OAV) was determined using the odor thresholds of the respective compounds detected in beer [32–34].

Table S4. Aroma analysis of Riesling wines at the end of fermentations with KOK hybrids, all of the spore clones, their parental strains as well as GHM control strain.

	Strain	Apple [OAV]	Pineapple [OAV]	Tropical [OAV]	Banana [OAV]	Honey/rose [OAV]	Green [OAV]	Fruity [OAV]
GHM	GYBC 142	14.71 ± 1.27	63.76 ± 4.04	13.06 ± 0.94	75.51 ± 6.90	6.72 ± 0.12	0.76 ± 0.08	107.16 ± 8.51
<i>Oppenheimer Kreuz 1894</i>	GYBC 126	22.36 ± 5.87	77.11 ± 21.39	22.93 ± 5.05	76.50 ± 21.50	2.71 ± 0.18	0.66 ± 0.04	115.87 ± 26.86
<i>Freya</i>	GYBC 147	18.50 ± 0.12	184.35 ± 5.26	18.02 ± 0.15	193.44 ± 5.29	8.08 ± 0.44	0.80 ± 0.02	233.46 ± 5.22
	GYBC 263	16.94 ± 2.64	44.18 ± 5.11	17.16 ± 13.28	40.45 ± 9.20	4.34 ± 0.61	0.42 ± 0.05	74.26 ± 7.87
Zygotes	GYBC 885	13.83 ± 1.89	29.50 ± 10.88	10.30 ± 1.57●	38.81 ± 11.15	4.86 ± 0.25●	0.60 ± 0.04□	65.76 ± 13.29
	GYBC 886	15.24 ± 2.10	39.06 ± 10.24	26.23 ± 12.83	33.65 ± 4.59	4.36 ± 0.61	0.69 ± 0.05□	77.66 ± 10.24
Spore clones	GYBC 888	26.44 ± 0.42□	61.20 ± 5.73	27.26 ± 3.97	52.77 ± 8.21	2.58 ± 0.18□	0.61 ± 0.01□	98.92 ± 5.57
	GYBC 889	17.07 ± 1.04	46.93 ± 1.44	16.28 ± 0.38	46.29 ± 1.33	2.31 ± 0.08□	0.50 ± 0.01●	76.99 ± 2.09
	GYBC 890	21.73 ± 1.47	56.26 ± 8.95	15.75 ± 0.65	54.63 ± 10.06	2.84 ± 0.13	0.48 ± 0.02●	89.29 ± 11.74
	GYBC 891	19.99 ± 2.33	76.26 ± 0.87□	18.09 ± 0.84	76.41 ± 0.51□	3.42 ± 0.08●	0.61 ± 0.07	114.05 ± 2.30□
	GYBC 892	22.14 ± 0.92	40.36 ± 1.17	17.04 ± 1.21	34.02 ± 0.61	1.84 ± 0.11●□	0.43 ± 0.02●	64.24 ± 1.27
	GYBC 893	19.43 ± 2.13	62.81 ± 6.20	16.83 ± 0.96	61.58 ± 6.22	2.88 ± 0.17	0.49 ± 0.01●	95.38 ± 8.18
	GYBC 894	16.87 ± 2.67	51.74 ± 19.37	15.54 ± 1.71	51.69 ± 21.20	3.09 ± 0.19	0.48 ± 0.04	82.30 ± 24.82
	GYBC 895	23.02 ± 3.84	72.81 ± 13.54	21.03 ± 2.96	70.96 ± 13.48	2.56 ± 0.30□	0.56 ± 0.03	109.21 ± 17.67
	GYBC 896	12.33 ± 3.44	31.12 ± 8.21	11.73 ± 2.27	35.18 ± 7.85	2.65 ± 0.14□	0.51 ± 0.04	62.61 ± 12.63
	GYBC 897	15.67 ± 3.71	26.09 ± 17.10	10.94 ± 3.10	26.04 ± 13.76	1.76 ± 0.10●□	0.36 ± 0.02●	51.99 ± 17.67
	GYBC 898	12.86 ± 0.24	92.46 ± 25.30	10.87 ± 0.74●	99.63 ± 24.61	9.34 ± 0.39●□	0.65 ± 0.03□	131.02 ± 25.54
	GYBC 899	29.62 ± 2.54□	69.63 ± 47.05	52.16 ± 49.07	38.12 ± 3.80	2.35 ± 0.09□	0.44 ± 0.00●	103.37 ± 50.81
	GYBC 900	30.31 ± 15.63	104.83 ± 82.64	60.83 ± 69.78	75.44 ± 29.58	3.79 ± 1.02	0.61 ± 0.12	154.45 ± 103.26
	GYBC 901	18.28 ± 2.38	119.11 ± 49.50	16.53 ± 1.14	125.78 ± 49.57	6.22 ± 0.15●□	0.84 ± 0.04●□	165.20 ± 50.74
	GYBC 902	31.67 ± 6.37	48.07 ± 3.72	36.03 ± 7.13	33.17 ± 16.47	2.08 ± 0.38□	0.40 ± 0.01●	81.56 ± 8.02
	GYBC 903	20.33 ± 2.04	36.08 ± 10.89	13.47 ± 1.68	30.71 ± 9.97	1.45 ± 0.06●□	0.36 ± 0.03●	60.34 ± 12.46

The analyzed wine flavors were apple [OAV] (sum of ethyl hexanoate, ethyl acetate, ethyl butyrate, hexyl acetate), pineapple [OAV] (sum of isoamyl acetate, ethyl butyrate, ethyl octanoate, ethyl isobutyrate), tropical [OAV] (sum of ethyl octanoate, ethyl decanoate, ethyl butyrate, ethyl hexanoate, ethyl isobutyrate), banana [OAV] (sum of isoamyl acetate, amyl acetate, isoamyl alcohol), honey/rose [OAV] (sum of 2-phenylethanol, 2-phenylethyl

acetate), green [OAV] (sum of hexanol, hexyl acetate, amyl alcohol), and fruity [OAV] (sum of ethyl acetate, ethyl propionate, ethyl butyrate, ethyl isobutyrate, ethyl lactate, ethyl hexanoate, ethyl octanoate, ethyl decanoate, ethyl 2-hydroxy-4-methylvalerate, diethylsuccinate, hexyl acetate, amyl acetate, isoamyl acetate, 2-phenylethyl acetate, hexanol, isobutanol, 2-phenylethanol, amyl alcohol, isoamylalcohol). Results are presented as the mean $\pm$ SD of three biological replicates (except for GYBC 263 n=5 and GYBC 126 n=6). Significant differences in flavor formation between the spore clones and their respective parental strains were determined using a classical ANOVA, including a homogeneity test with Welch's correction and a Post Hoc test using the Games-Howell-test, $p < 0.05$ as compared to the control ($\bullet$ = GYBC 126; $\square$ = GYBC 263). The OAV was determined using the odor thresholds of the respective compounds detected in wine [35–40].