

**Table S2. Correlation analysis between the 18 phenotypic traits within the population of 72 stains.** Pearson's Product Moment correlation coefficients.

	Cell number	Dry weight	V <sub>max</sub>	CO <sub>2F</sub>	T <sub>75</sub>	T <sub>50</sub>	V <sub>50</sub>	Succinate	Glycerol	Acetate	Isobutanol	Isobutyl.acetate	Isoamyl.alcohol	Isoamyl.acetate	Ethyl.acetate	Ethyl.butyrate	Ethyl.hexanoate	Ethyl.octanoate
<b>Cell number</b>	<b>1.00</b>	0.31	0.37	0.23	-0.32	-0.36	0.24	-0.07	-0.23	-0.32	0.03	-0.21	0.10	-0.24	-0.35	-0.05	0.01	0.02
<b>Dry weight</b>	0.31	<b>1.00</b>	0.25	<b>0.71</b>	-0.47	-0.47	0.35	0.02	-0.29	-0.34	0.35	0.12	0.37	0.19	0.01	-0.24	0.28	0.24
<b>V<sub>max</sub></b>	0.37	0.25	<b>1.00</b>	0.03	-0.52	<b>-0.73</b>	0.48	0.30	-0.21	-0.56	0.03	0.14	0.50	0.33	-0.26	-0.50	0.16	0.31
<b>CO<sub>2F</sub></b>	0.23	<b>0.71</b>	0.03	<b>1.00</b>	-0.46	-0.35	0.34	-0.05	-0.19	-0.10	0.26	0.07	0.09	0.16	0.10	0.14	0.12	-0.08
<b>T<sub>75</sub></b>	-0.32	-0.47	<b>-0.52</b>	-0.46	<b>1.00</b>	<b>0.92</b>	<b>-0.81</b>	-0.15	0.24	0.27	-0.12	-0.23	-0.28	-0.26	0.04	-0.03	0.03	-0.15
<b>T<sub>50</sub></b>	-0.36	-0.47	<b>-0.73</b>	-0.35	<b>0.92</b>	<b>1.00</b>	<b>-0.78</b>	-0.21	0.34	0.42	-0.12	-0.27	-0.37	-0.32	0.06	0.11	-0.04	-0.23
<b>V<sub>50</sub></b>	0.24	0.35	<b>0.48</b>	0.34	<b>-0.81</b>	<b>-0.78</b>	<b>1.00</b>	0.27	-0.11	-0.30	-0.02	0.37	0.21	0.40	0.16	0.02	-0.04	0.23
Succinate	-0.07	0.02	0.30	-0.05	-0.15	-0.21	0.27	<b>1.00</b>	0.55	-0.18	0.02	0.31	0.32	0.39	0.20	-0.22	-0.09	0.08
Glycerol	-0.23	-0.29	-0.21	-0.19	0.24	0.34	-0.11	0.55	<b>1.00</b>	0.29	-0.04	0.23	-0.05	0.12	0.18	-0.01	-0.12	-0.12
<b>Acetate</b>	-0.32	-0.34	-0.56	-0.10	0.27	0.42	-0.30	-0.18	0.29	<b>1.00</b>	-0.11	-0.03	<b>-0.66</b>	-0.30	0.15	0.31	-0.27	-0.11
Isobutanol	0.03	0.35	0.03	0.26	-0.12	-0.12	-0.02	0.02	-0.04	<b>-0.11</b>	<b>1.00</b>	0.45	0.40	0.10	0.03	-0.13	0.07	0.06
Isobutyl.acetate	-0.21	0.12	0.14	0.07	-0.23	-0.27	0.37	0.31	0.23	-0.03	0.45	<b>1.00</b>	0.17	<b>0.51</b>	<b>0.44</b>	-0.14	-0.08	0.31
<b>Isoamyl.alcohol</b>	0.10	0.37	0.50	0.09	-0.28	-0.37	0.21	0.32	-0.05	<b>-0.66</b>	0.40	0.17	<b>1.00</b>	<b>0.49</b>	-0.14	-0.39	0.34	0.23
Isoamyl.acetate	-0.24	0.19	0.33	0.16	-0.26	-0.32	0.40	0.39	0.12	-0.30	0.10	<b>0.51</b>	<b>0.49</b>	<b>1.00</b>	<b>0.51</b>	-0.16	0.31	0.07
Ethyl acetate	-0.35	0.01	-0.26	0.10	0.04	0.06	0.16	0.20	0.18	0.15	0.03	<b>0.44</b>	-0.14	<b>0.51</b>	<b>1.00</b>	0.10	0.07	0.00
Ethyl butyrate	-0.05	-0.24	-0.50	0.14	-0.03	0.11	0.02	-0.22	-0.01	0.31	-0.13	-0.14	-0.39	-0.16	0.10	<b>1.00</b>	-0.27	-0.21
Ethyl hexanoate	0.01	0.28	0.16	0.12	0.03	-0.04	-0.04	-0.09	-0.12	-0.27	0.07	-0.08	0.34	0.31	0.07	-0.27	<b>1.00</b>	-0.04
Ethyl octanoate	0.02	0.24	0.31	-0.08	-0.15	-0.23	0.23	0.08	-0.12	-0.11	0.06	0.31	0.23	0.07	0.00	-0.21	-0.04	<b>1.00</b>