Additional file

Engineered *Zymomonasmobilis* tolerant to acetic acid and low pH via multiplex atmospheric and room temperature plasma mutagenesis

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Table S1 pH values of RM supplemented with acetic acid or sodium acetate

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| **Medium** | **pH value** |
| RM | 6.60 |
| RM+ 1 g/L acetic acid | 4.90 |
| RM+ 2 g/L acetic acid | 4.48 |
| RM+ 3 g/L acetic acid | 4.28 |
| RM+ 4 g/L acetic acid | 4.15 |
| RM+ 5 g/L acetic acid | 4.05 |
| RM+ 6 g/L acetic acid | 3.98 |
| RM+ 7 g/L acetic acid | 3.92 |
| RM+ 8 g/L acetic acid | 3.86 |
| RM+ 9 g/L acetic acid | 3.81 |
| RM+ 10 g/L acetic acid | 3.77 |
| RM+ 11 g/L acetic acid | 3.74 |
| RM+ 12 g/L acetic acid | 3.71 |
| RM+ 13 g/L acetic acid | 3.67 |
| RM+ 14 g/L acetic acid | 3.64 |
| RM+ 15 g/L acetic acid | 3.61 |
| RM+ 150 mM sodium acetate\* | 5.97 |
| RM+ 200mM sodium acetate\* | 6.02 |
| RM+ 250mM sodium acetate\* | 6.00 |

\*Sodium acetate trihydratewas used, equaling to 12.3 g/L, 16.4 g/L and 20.5 g/L sodium acetate, respectively.

Figure S1



Tolerance of AQ8-1, AC8-9 and ZM4 to mixture of acetic acid and furfural. “A” indicates acetic acid and “F” indicates furfural. The number after A or F indicates the concentration of corresponding inhibitor. The concentrations of acetic acid ranged from 1.0 to 7.0 g/L, and furfural from 1.0 to 3.0 g/L in the mixture. OD600 nm valueswere measuredat stationery phase.