

Table S1 | Design and results of the experiments using steepest-ascent method

Run numbers	X <sub>1</sub> (g/L)	X <sub>3</sub> (g/L)	X <sub>6</sub> (g/L)	Y <sub>1</sub>	Y <sub>2</sub>
				(10 <sup>10</sup> CFU/mL)	(mm/mL)
1	10	10	2.5	0.73	149.00
2	15	15	3	1.32	159.60
3	20	20	3.5	1.43	162.45
4	25	25	4	0.81	162.35
5	30	30	4.5	0.62	158.40
6	35	35	5	0.77	157.55