

## **Supplementary materials**

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**Table S1** Positive ion A gradient elution conditions

step	Total time (min)	A (%)	B (%)	flow rate
1	0.00	90	3	0.4
2	1.00	90	3	0.4
3	1.10	60	15	0.4
4	9.50	40	75	0.4
5	9.60	10	95	0.4
6	11.50	10	95	0.4
7	11.60	90	3	0.4
8	13.00	97	3	0.4

**Table S2** Positive ion B gradient elution conditions

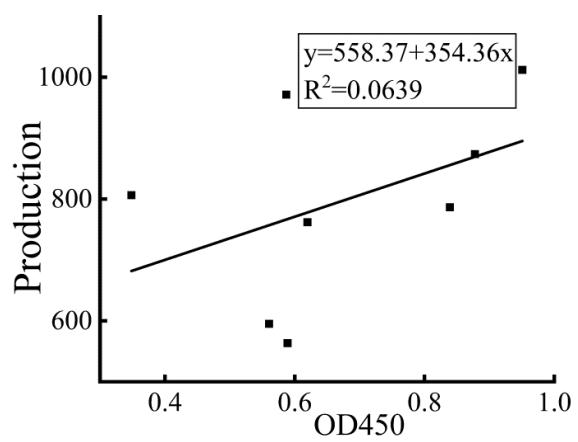
step	Total time (min)	A (%)	B (%)	flow rate
1	0.00	90	10	0.3
2	0.50	90	10	0.3
3	3.00	60	40	0.3
4	6.00	40	60	0.3
5	6.50	10	90	0.3
6	8.00	10	90	0.3
7	8.20	90	10	0.3

**Table S3** Negative ion gradient elution conditions

step	Total time (min)	A (%)	B (%)	flow rate
1	0.00	80	20	0.5
2	0.50	80	20	0.5
3	2.80	2	98	0.5
4	4.00	2	98	0.5
5	4.10	80	20	0.5
6	6.00	80	20	0.5

**Table S4** Mass spectrometry conditions in MRM mode

condition	positive ions	negative ions
electrospray voltage	5500	-4500
curtain air pressure	30 psi	30 psi
ion source atomizer temperature	600°C	600°C
atomizing gas pressure	50 psi	50 psi
auxiliary gas pressure	60 psi	60 psi
Ihe	on	on



**Figure S1.** Correlation between production of mung bean sprouts and OD450

in circulating water in 96h.