

Table S1. Factors and levels in the RSM experimental design.

Factors	Code	Code Level		
		-1	0	1
IPTG concentrations (mmol/L)	A	0.1	0.2	0.3
Induction time (h)	B	12	16	20
Induction temperatures (°C)	C	15	20	25

Table S2. Experimental design used in RSM studies and responses for the optimization of induction conditions.

Run Number	Coded Variables			Gray Values
	A	B	C	Y
1	0	0	0	27.38
2	1	-1	0	19.15
3	0	0	0	26.22
4	-1	-1	0	19.51
5	-1	1	0	16.31
6	1	1	0	19.29
7	0	0	0	27.37
8	1	0	1	15.46
9	0	0	0	27.39
10	0	0	0	27.21
11	1	0	-1	21.89
12	0	1	-1	20.77
13	-1	0	-1	19.26
14	0	1	1	14.83
15	0	-1	1	15.85
16	0	-1	-1	18.71
17	-1	0	1	16.14

Figure S1 The three-dimensional response surface plots and two-dimensional contour plots of the relative effects on gray value. (a) and (d): IPTG concentration and induction time; (b) and (e): IPTG concentration and induction temperature; (c) and (f): Induction temperature and induction time.

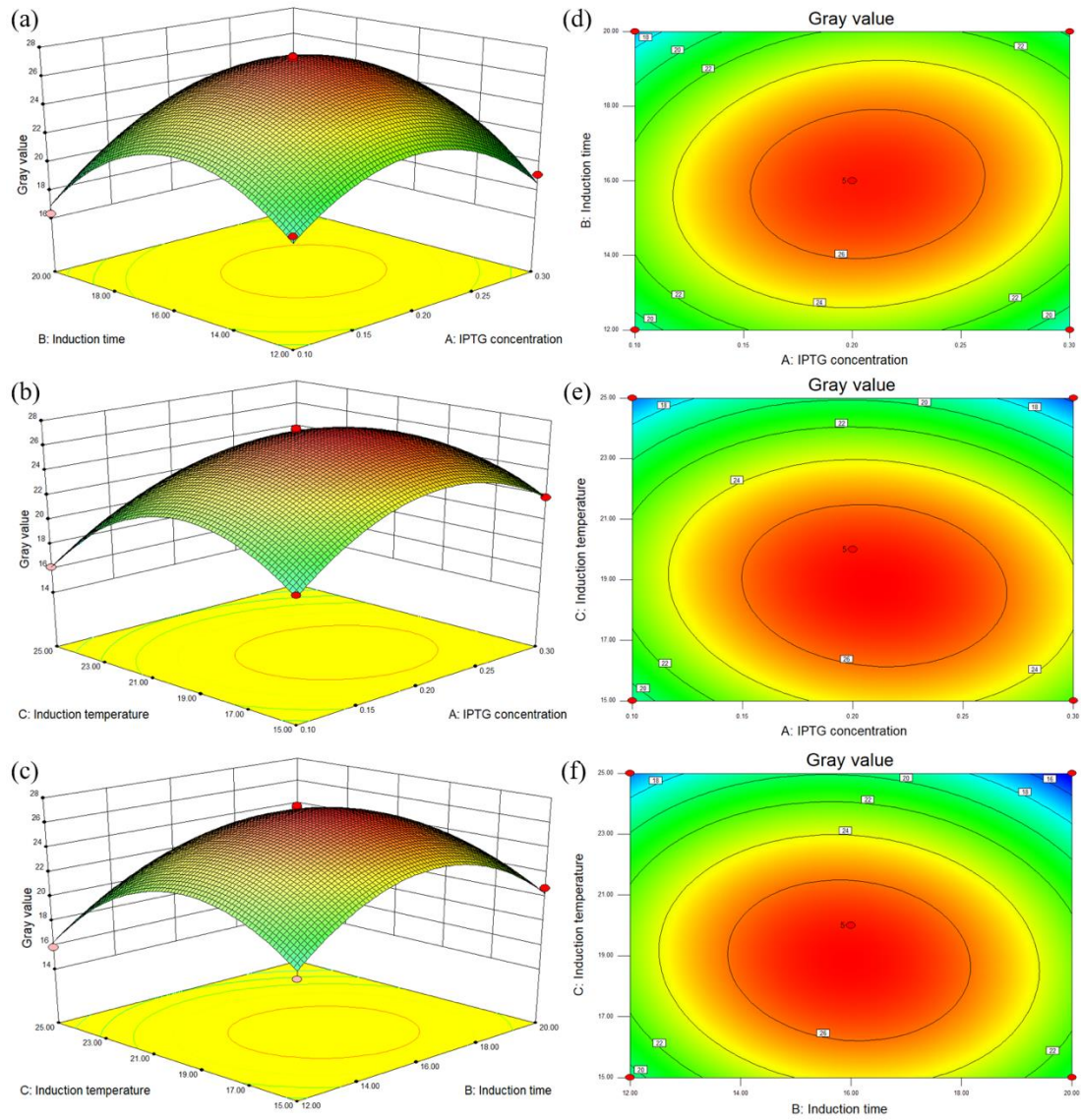


Figure S2 The MICs of crescent sweetlips hepcidin peptides prepared by different methods.

(a-c) The MIC of synthetic hepcidin peptide against *V. parahaemolyticus*, *E. coli*, and *S. aureus*.

(d-f) The MIC of hepcidin peptide obtained by expression system against *V. parahaemolyticus*, *E. coli*, and *S. aureus*. * $p < 0.05$, compared with 0 h.

