

**Table S1.** Plackett-Burman design in 12 runs to 6 factors. The response is proteolytic activity.

<b>Trial number</b>	<b>Run order</b>	<b>Silkworm pupae (%)<sup>*</sup></b>	<b>Casein (%)<sup>*</sup></b>	<b>Soy oil (%)<sup>*</sup></b>	<b>(NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub> (%)<sup>*</sup></b>	<b>ZnCl<sub>2</sub> (%)<sup>*</sup></b>	<b>CaCl<sub>2</sub>·2H<sub>2</sub>O (%)<sup>*</sup></b>	<b>Proteolytic activity (U/mL)<sup>**</sup></b>
9	1	0.00	0.10	0.10	2.00	0.20	0.20	122.22 ± 31.43
12	2	0.00	0.10	0.10	0.50	0.01	0.01	1161.11 ± 86.42
4	3	2.50	0.10	2.00	2.00	0.01	0.20	2127.78 ± 7.86
11	4	0.00	2.50	0.10	0.50	0.01	0.20	1538.89 ± 7.85
2	5	2.50	2.50	0.10	2.00	0.01	0.01	1116.67 ± 86.42
5	6	2.50	2.50	0.10	2.00	0.20	0.01	955.56 ± 78.57
1	7	2.50	0.10	2.00	0.50	0.01	0.01	2322.22 ± 57.74
6	8	2.50	2.50	2.00	0.50	0.20	0.20	4811.11 ± 491.03
3	9	0.00	2.50	2.00	0.50	0.20	0.01	366.67 ± 130.99
8	10	0.00	0.10	2.00	2.00	0.20	0.01	418.51 ± 35.72
7	11	0.00	2.50	2.00	2.00	0.01	0.20	2285.19 ± 289.81
10	12	2.50	0.10	0.10	0.50	0.20	0.20	3588.89 ± 172.49

<sup>\*</sup> All percentages refer to the ratio of mass to volume.

<sup>\*\*</sup> Proteolytic activity is expressed as mean ± SD.