

## Supplementary material

### Integrated utilization of dairy whey in probiotic $\beta$ -galactosidase production and enzymatic synthesis of galacto-oligosaccharides

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Table S1 Statistical analysis of variables based on PB design

Variables	Effect	Coefficient	T value	Pr >   t
Term				
Constant		-334	-1.92	0.113
A	85.50	42.75	11.88	0.000*
B	254.0	127.0	4.41	0.007
C	-79.2	-39.6	-1.10	0.321
D	258.3	129.2	3.59	0.016
E	-139.2	-69.6	-3.87	0.012
F	57.48	28.74	8.98	0.000*

\* Significant variables for enzyme production.

Table S2 ANNOVA for PB design model

Source	DF	Adj SS	Adj MS	F Value	Pr >   f
Model	6	672231	112039	45.06	0.000
Linear	6	672231	112039	45.06	0.000
A	1	350892	350892	141.11	0.000
B	1	48387	48387	19.46	0.007
C	1	3008	3008	1.21	0.321
D	1	32033	32033	12.88	0.016
E	1	37185	37185	14.95	0.012
F	1	200725	200725	80.72	0.000
Error	5	12433	2487		
Total	11	684665			

Adj SS, Adjusted Sum of Square; Adj MS, Adjusted Mean Square; DF, Degrees of Freedom.