

**Table S1.** The response surface analysis of variance (ANOVA).

Source	Sum of Source	df	Mean Source	F-value	P-value
Model	62.93	9	6.99	52.48	0.0001
<i>A</i> -Flow Rate	1.89	1	1.89	14.17	0.0070
<i>B</i> -Temperature	10.72	1	10.72	80.45	0.0001
<i>C</i> -Time	0.032	1	0.032	0.24	0.6390
AB	4.09	1	4.09	30.70	0.0009
AC	2.12	1	2.12	15.88	0.0053
BC	2.70	1	2.70	20.30	0.0028
<i>A</i> <sup>2</sup>	0.34	1	0.34	2.57	0.1531
<i>B</i> <sup>2</sup>	29.78	1	29.78	223.53	0.0001
<i>C</i> <sup>2</sup>	13.09	1	13.09	98.23	0.0001
Residual	0.93	7	0.13		
<i>Lack of Fit</i>	0.40	3	0.13	1.00	0.4792
<i>Error</i>	0.53	4	0.13		
Cor Total	63.87	16			

**Table S2.** Affinity values of compounds 1-23 and acarbose with  $\alpha$ -glucosidase.

Compounds number	Affinity (kcal/mol)	Compounds number	Affinity (kcal/mol)
1	-8.6	13	-8.3
2	-8.1	14	-12.6
3	-9.7	15	-7.2
4	-9.4	16	-12.2
5	-7.1	17	-8.7
6	-9.3	18	-8.6
7	-9.4	19	-12.7
8	-8.9	20	-8.7
9	-11.6	21	-12.6
10	-8.3	22	-9.2
11	-9.4	23	-9.4
12	-7.7	acarbose	-8.5