Title: Enhanced acidic adaptation of *Bacillus subtilis* Ca-independent alpha-amylase by rational engineering of pKa values

Authors: Cheng-Hua Wang, Xiao-Ling Liu, Ri-Bo Huang, Bing-Fang He, Mou-Ming Zhao

PII: S1369-703X(18)30308-5
DOI: https://doi.org/10.1016/j.bej.2018.08.015
Reference: BEJ 7026

To appear in: *Biochemical Engineering Journal*

Received date: 11-4-2018
Revised date: 25-8-2018
Accepted date: 27-8-2018

Please cite this article as: Wang C-Hua, Liu X-Ling, Huang R-Bo, He B-Fang, Zhao M-Ming, Enhanced acidic adaptation of *Bacillus subtilis* Ca-independent alpha-amylase by rational engineering of pKa values, *Biochemical Engineering Journal* (2018), https://doi.org/10.1016/j.bej.2018.08.015

Enhanced acidic adaptation of *Bacillus subtilis* Ca-independent alpha-amylase by rational engineering of pKa values

Cheng-Hua Wang [a, *], Xiao-Ling Liu [a], Ri-Bo Huang [b, *], Bing-Fang He [c], Mou-Ming Zhao [a]

[a] College of Light Industry and Food Engineering, Guangxi University, Nanning 530004, People's Republic of China.

[b] State Key Laboratory of Non-Food Biomass and Enzyme Technology, National Engineering Research Center for Non-food Biorefinery, Guangxi Key Laboratory of Biorefinery, Guangxi Academy of Sciences, Nanning 530007, People's Republic of China.

[c] College of Biotechnology and Pharmaceutical Engineering, Nanjing University of Technology, Nanjing 211816, People's Republic of China.

Cheng-Hua Wang, E-mail: chwang@gxu.edu.cn

Xiao-Ling Liu, E-mail: 1106133912@qq.com

Ri-Bo Huang, E-mail: rbhuang@gxas.cn

Bing-Fang He, E-mail: bingfanghe@njut.edu.cn

Mou-Ming Zhao, E-mail: zmmgxu@gxu.edu.cn