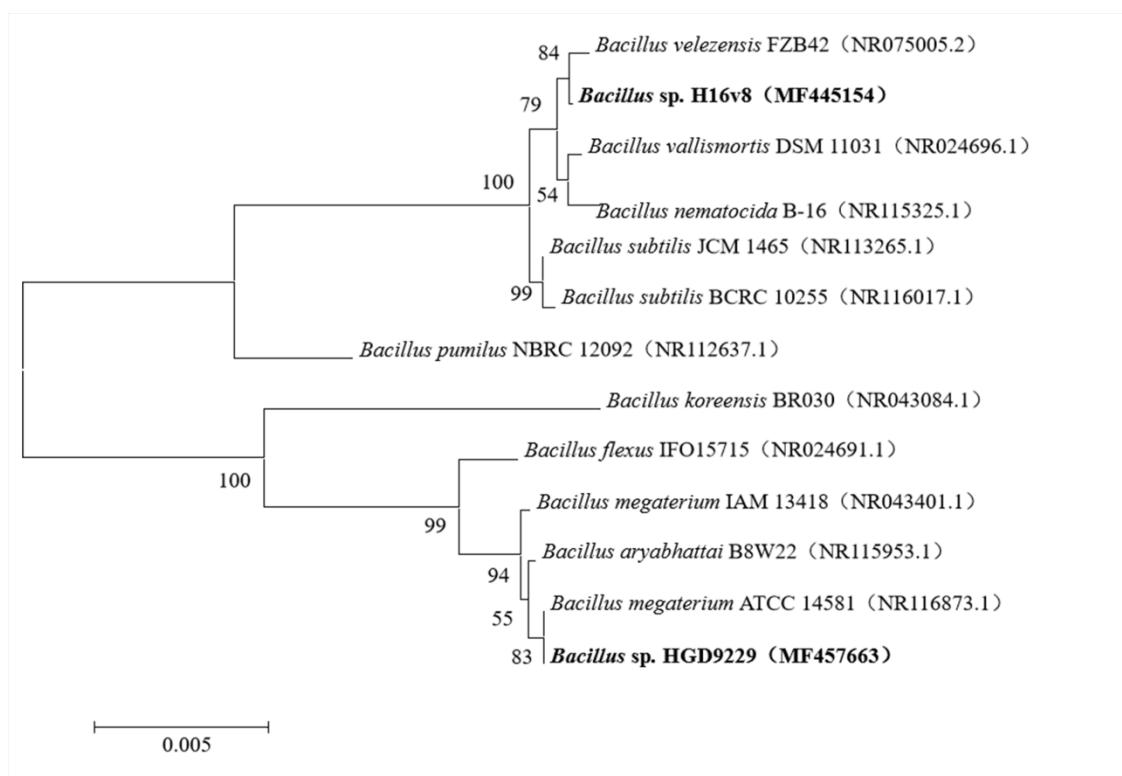
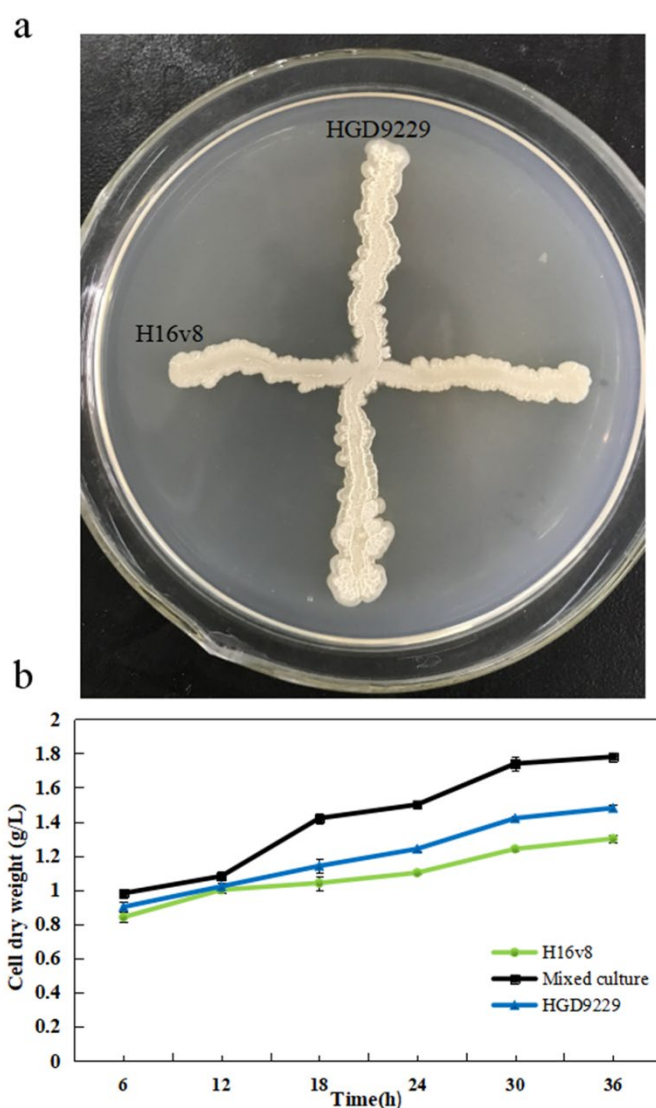


# Supplementary Materials: Co-Cultivation of Two *Bacillus* Strains for Improved Cell Growth and Enzyme Production to Enhance the Degradation of Aflatoxin B<sub>1</sub>

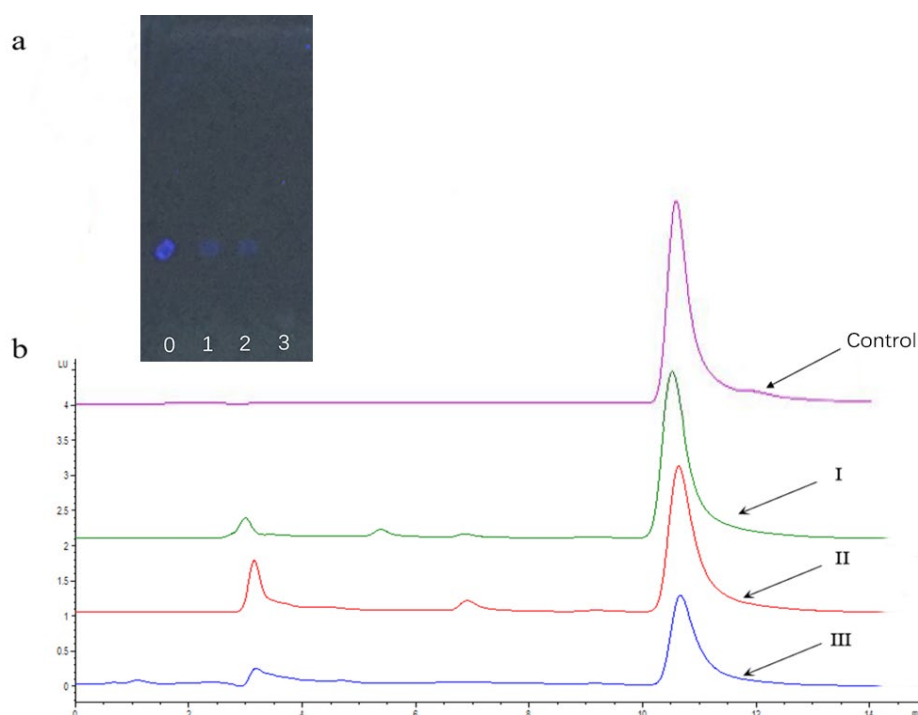
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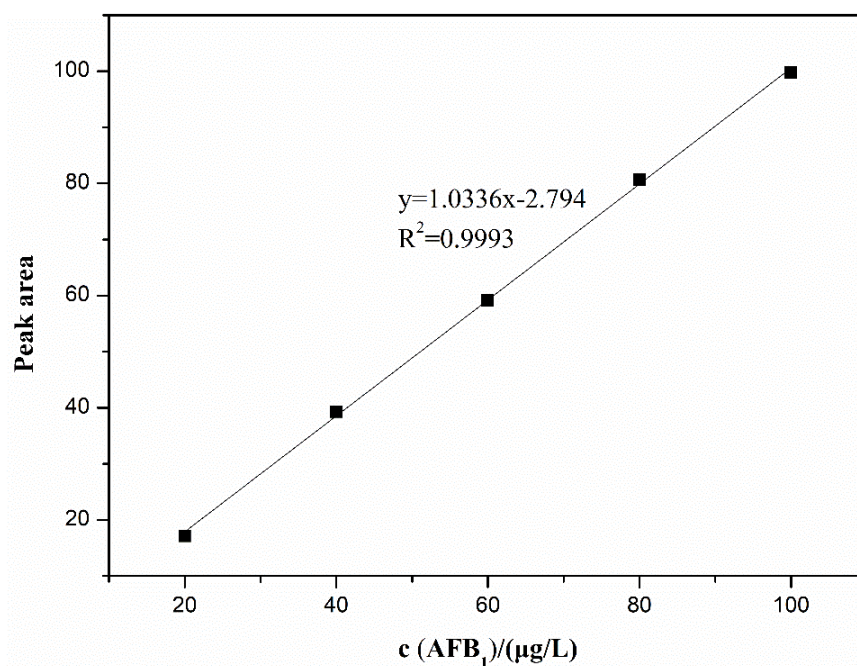
**Figure S1.** The two bacterial phylogenetic trees based on 16S rRNA gene sequence. The Neighbor-Joining (NJ) method was used to infer the evolutionary history. The number on the branch point refers to the self-service value based on 1000 resampling.



**Figure S2.** Co-culture and cell dry weight test of two kinds of bacteria. (a) *Bacillus* sp. H16v8 and *Bacillus* sp. HGD9229 were cross-inoculated on the same plate and cultivated at 37 °C for 24 h. Two kinds of bacteria cultured in NB medium. (b). The cell dry weight at different fermentation times and the cultures performed at 37 °C.



**Figure S3.** Degradation of AFB<sub>1</sub> by the cultures of *Bacillus* sp. H16v8, *Bacillus* sp. HGD9229 and mixed *Bacillus* in vitro from the initial AFB<sub>1</sub> concentration of 100 µg/L. **(a)** TLC plate showing degradation of AFB<sub>1</sub>. Lane 0: The AFB<sub>1</sub> standard solution added to the sterile NB without stains after 12 h of incubation as the Control; Lane 1: the AFB<sub>1</sub> standard solution treated with *Bacillus* sp. H16v8 (the initial concentration of AFB<sub>1</sub> was 100 µg/L) after 12 h of incubation; Lane 2: the AFB<sub>1</sub> standard solution treated with *Bacillus* sp. HGD9229 after 12 h of incubation; Lane 3: the AFB<sub>1</sub> standard solution treated with the mixed cultures of *Bacillus* sp. H16v8 and *Bacillus* sp. HGD9229 after 12 h of incubation. **(b)** HPLC chromatogram: Control: the AFB<sub>1</sub> standard solution added to the sterile NB without stains after 12 h of incubation; I: the AFB<sub>1</sub> standard solution treated with *Bacillus* sp. H16v8 after 12 h of incubation; II: the AFB<sub>1</sub> standard solution treated with *Bacillus* sp. HGD9229 after 12 h of incubation; III: the AFB<sub>1</sub> standard solution treated with the mixed cultures of *Bacillus* sp. H16v8 and *Bacillus* sp. HGD9229 after 12 h of incubation.



**Figure S4.** The standard curve of AFB<sub>1</sub> by HPLC. The peak area varied with the concentration of AFB<sub>1</sub>. The concentration of AFB<sub>1</sub> was analyzed using the Agilent 1260 HPLC with the Agilent C<sub>18</sub> column. AFB<sub>1</sub> was derived by a photochemical reactor and measured by a fluorescence detector.