

My comments

1. Basic Reporting

This work proposed the strategy to screen cohesin-dockerin interaction and validate the information obtained by bioinformatic tool, which can lead to high-throughput screening of the microbial whole genome. Much effort was made to elucidate the role and function of dockerin-cohesin interaction, which finally lead us to get the picture of cellulosome assembly—interlocking several building blocks like “Lego” construction. This work provides better understanding of and extends our knowledge on cellulosome architectures

2. Experimental Design

Experiments were carefully designed and methodology can be used as a guideline to study diversity of cohesin-dockerin interaction from different microbes.

3. Validity of the Findings

Importance in its field (biomass conversion/biocatalysts) and extend knowledge on beautifully natural-occurring cellulosomes evolved by nature.

4. General Comments for the Author

The results gained from this work are significant to cellulosome paradigm, which is related to plant cell wall degradation strategies—important for sustainable biofuel/chemical production from lignocellulose. However, I have found some erroneous in figure number running (sequence) that need minor modification.

The sequence of figure number mentioned here is based on those in the manuscript sent to review.

Line 220: Figure 4 doesn't show the dockerin sequences as you mentioned in the text. Is

Figure 7 you refer to? By the way Figure 7 is similar to Dassa et al., BMC Genomics 2012, 13:210. Did you modify from their work?

Line 259: (Figures 5A and 5B) should likely be Figures 4A and 4B; the explanation

matches to them. By the way there is some intensity on 4B Ct A2. Does it mean the purified *A. cellulolyticus* DocB could bind to *C. thermocellum* CohA2?

Line 262: (Figures 5C and 5D) should likely be Figures 4C and 4D?

Line 288: Figure 6 should be Figure 5?

Line 294: Figure 5 should be Figure 4 and Figure 6A should be Figure 5A?

Line 298: Figure 6B should be Figure 5B?

Line 303: Figure 7 should be Figure 6?

Figure 4

Line 617-618: *A. cellulolyticus* Xyn-DocB or (C, D) *C. thermocellum* Xyn-Doc48S (A, B) should be *A. cellulolyticus* Xyn-DocB (A, B) **or** *C. thermocellum* Xyn-Doc48S (C, D)

5. Recommendation

The manuscript can be accepted after minor revision.

6. Confidential note to the editor

No Comments