

**CLP1, a novel PHD domain protein, participates in
regulating cellulase gene expression in the filamentous
fungus *Trichoderma reesei***

Lei Wang, Renfei Yang, Yanli Cao, Fanglin Zheng, Xiangfeng Meng, Guanjun Chen,
Weixin Zhang^{*}, Weifeng Liu^{*}

State Key Laboratory of Microbial Technology, Shandong University, No.72 Binhai
Road, Qingdao 266237, P. R. China

^{*} Correspondence should be addressed to W Zhang or W Liu.

E-mail: zhangwx@sdu.edu.cn; weifliu@sdu.edu.cn

Supplemental Data

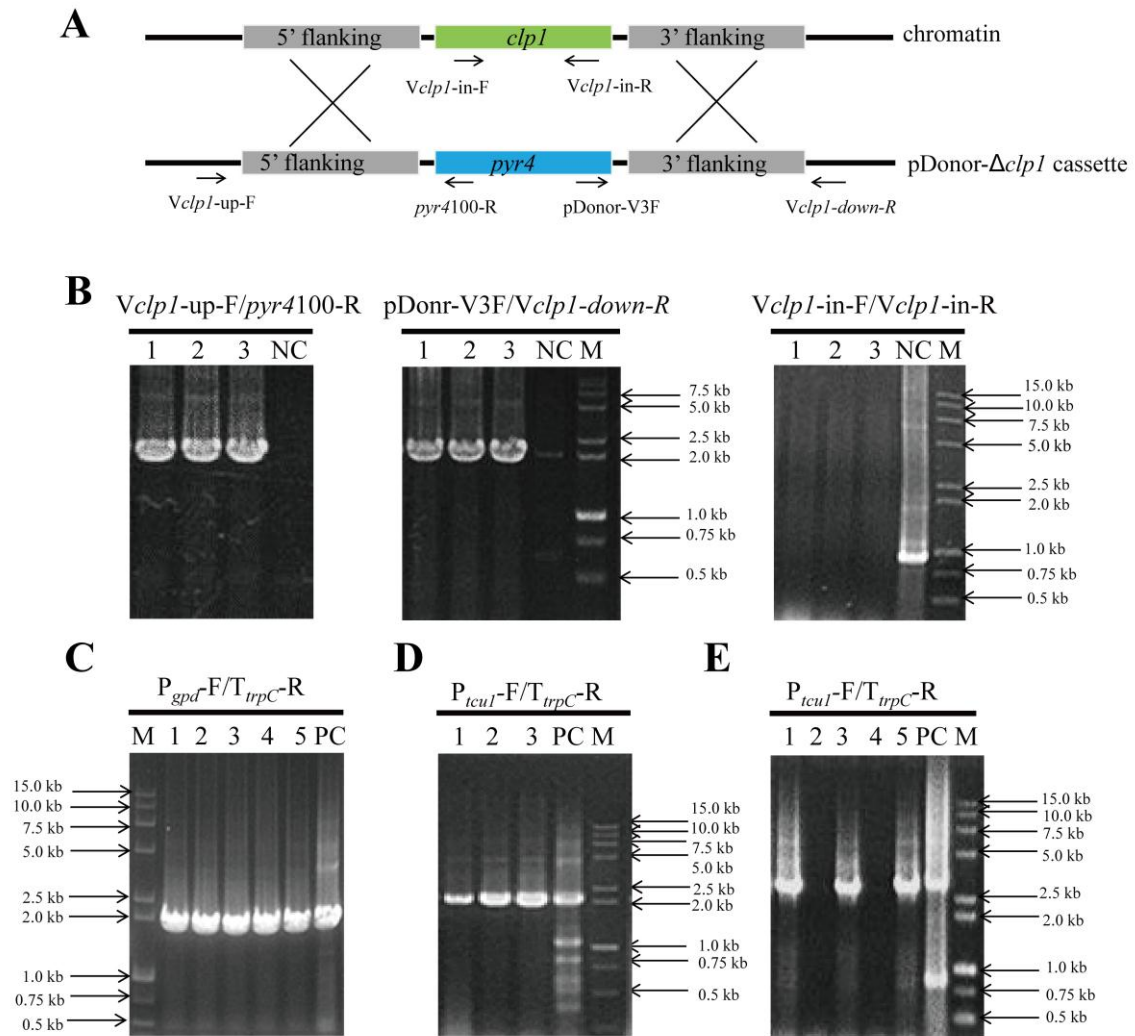


Fig. S1. Verification of correct DNA integration in the *T. reesei* mutant strains constructed in this study. (A-B) Schematic illustration of the *clp1* deletion cassette (A) and verification for its correct integration into the genome (B). (C) PCR amplification to verify correct integration of $P_{gpd-clp1-T_{trpC}}$, $P_{gpd-clp1_ΔUIM-T_{trpC}}$ and $P_{gpd-clp1_PHDM-T_{trpC}}$ plasmids in the $Δclp1$ strain, respectively. (D) PCR amplification to verify correct integration of $pMDP_{tcul-ace3-T_{trpC}}$ plasmid in the $Δclp1\&OEace3$ strain. (E) PCR amplification to verify correct integration of

pMDP_{tcu1-xyr1-TrpC} plasmid in the $\Delta clp1$ &OE_{xyr1} strain. All the amplified fragments correspond to the expected size.

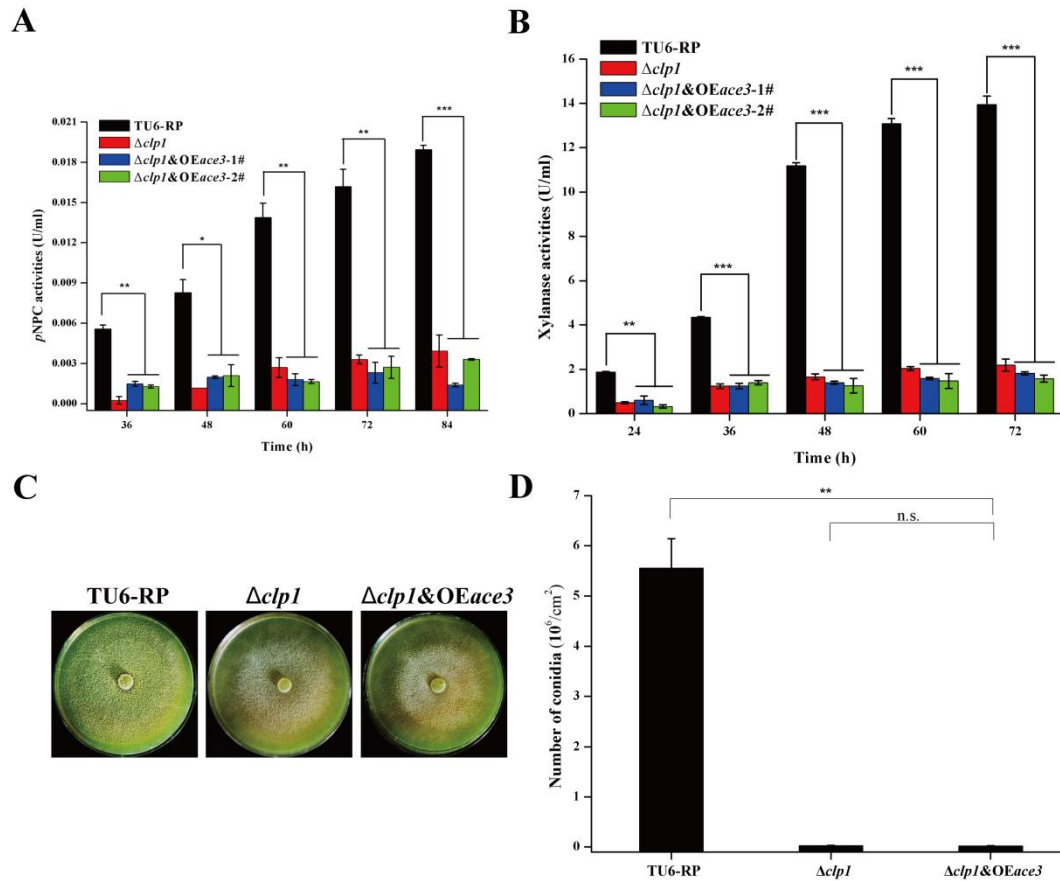


Fig. S2. Overexpression of ACE3 did not rescue the defect of cellulase expression and conidiation resulted from *clp1* deletion. (A-B) Extracellular pNPC activities (A) and xylanase activities (B) of the culture supernatant from TU6-RP, $\Delta clp1$ and $\Delta clp1$ &OE_{ace3} strains cultured on 1% (w/v) Avicel or 0.5% (w/v) xylan. (C-D) Conidia formation of the control strain TU6-RP, and $\Delta clp1$ and $\Delta clp1$ &OE_{xyr1} incubated on malt extract agar plates at 30 °C for 5 days (E) and conidia counting (F).

