Production and characterization of Cellulose nanocrystals from Eucalyptus dissolving pulp using endoglucanases from *Myceliophthora thermophila*

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Table S1. Primers (gene-specific) for cassette construction. The His6-tag encoding sequences were underlined

PubiD-F	CTTCTCGCTACCCATCTCTTTC
PubiD-R	CAACTCCGGAGCTGACATCG
PubiD-MtEG5A-F	CTTACGACTGCCGTCACCATGAAGTCCTCCATCCTCG
PubiD-MtEG5A-R	GTAACGTTAAGTGGATCTTAGTGGTGGTGGTGGTGGTGCGGCAAGTACTTCTTCAAG
PubiD-MtEG7A-F	CTTACGACTGCCGTCACCATGGGGCAGAAGACTCTCC
PubiD-MtEG7A-R	GTAACGTTAAGTGGATCCTAGTGGTGGTGGTGGTGGTG CAGGCACTGCGAGTAC
PubiD-MtEG12A-F	CTTACGACTGCCGTCACC ATGCAGCCGTTTCTGCTCTT
PubiD-MtEG12A-R	GTAACGTTAAGTGGATCTTAGTGGTGGTGGTGGTGGTG AGCAACCCTTGCAGAGTA
PubiD-MtEG45A-F	CTTACGACTGCCGTCACC ATGCATCTCTCCGCCACC
PubiD-MtEG45A-R	GTAACGTTAAGTGGATCTTAGTGGTGGTGGTGGTGGTG ACGGGAGCAGCCGCT

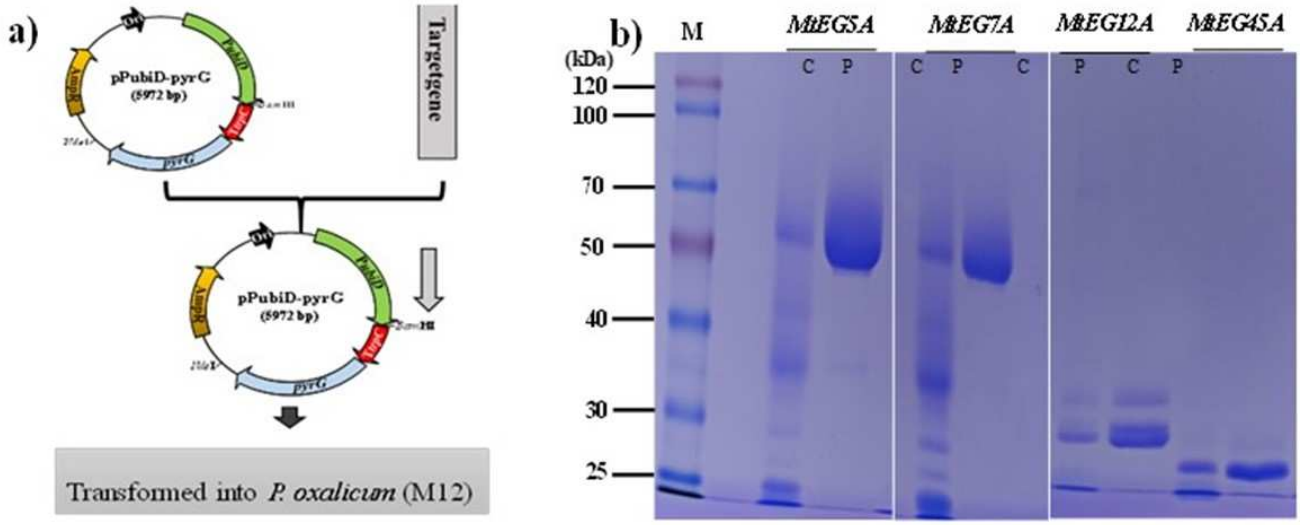


Figure S1. Schematic diagram of strain construction (a) and SDS PAGE analysis of crude and purified recombinant endoglucanases (b). In the SDS-PAGE, C and P refer to crude enzyme and purified endoglucanases, respectively.

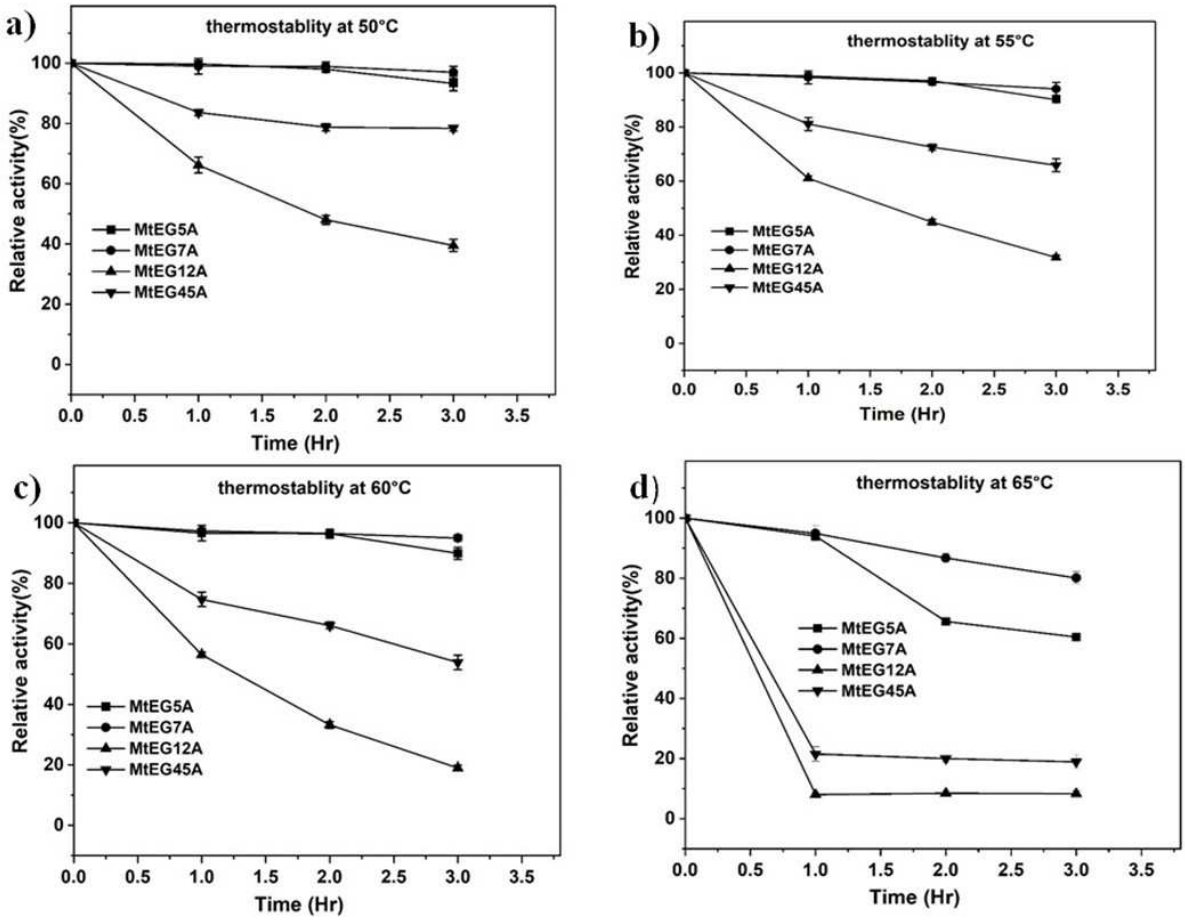


Figure S2. Thermostability of purified recombinant endoglucanases at 50℃(a), 55℃ (b), 60 ℃ (c), and 65℃ (d).

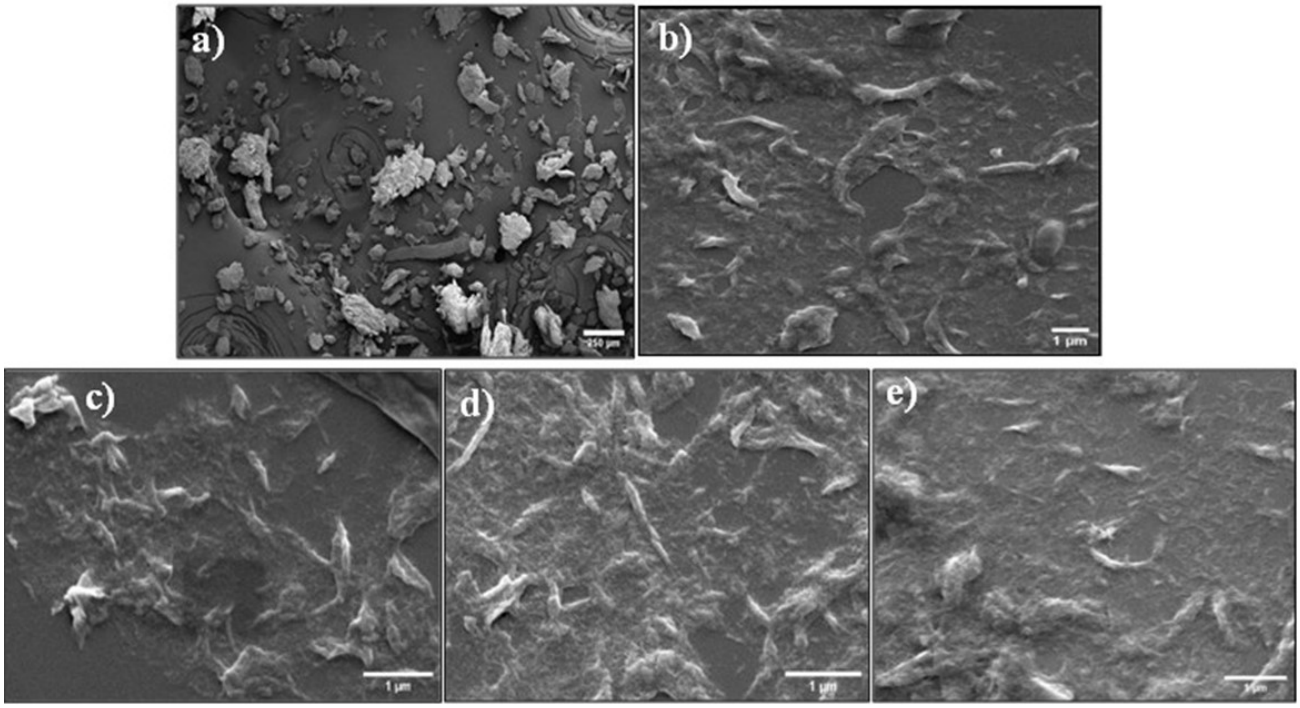


Figure S3. SEM images of EDP (a) and CNCs prepared by enzymatic hydrolysis of EDP using MtEG5A (b), (5+7) (c), (5+12) (d), and (5+7+45) (e), respectively.

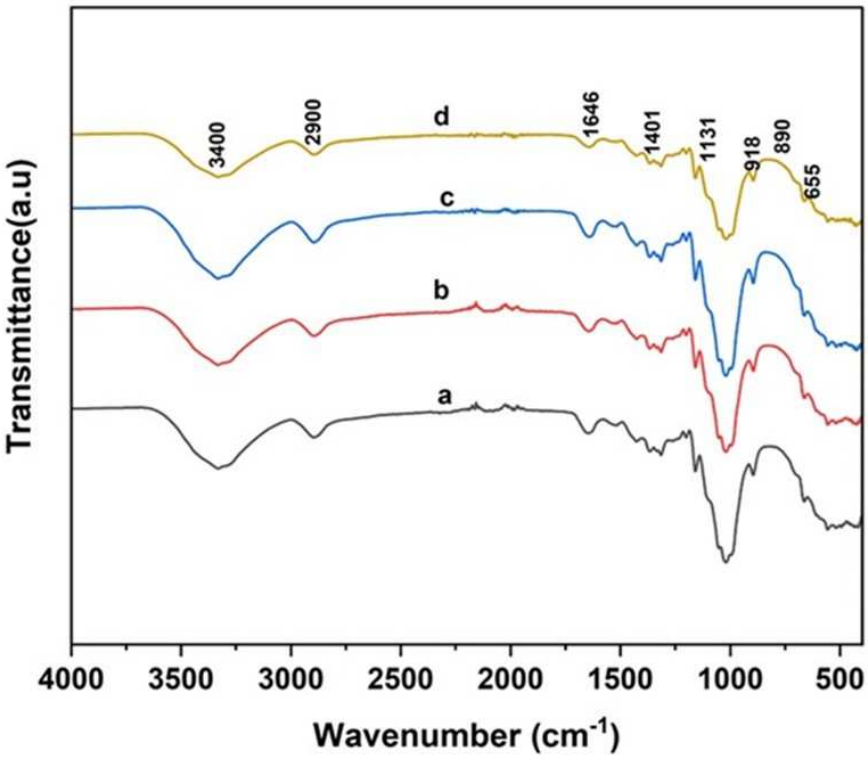


Figure S4. FTIR of CNCs prepared by enzymatic hydrolysis of EDP using MtEG5A (a); (5+7) (b); (5+12) (c); and (5+7+45) (d), respectively.