Title: Heterologous expression of a *Streptomyces cyaneus* laccase for biomass modification applications

Supplementary Material

AMB Express

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Fig. S1 Activity assays of *Sc*Lac before and after incubation with 0.5 mM $CuSO_4$.

Fig. S2 Zymogram analysis of purified laccase expressed in *E. coli*.

Supplementary figures

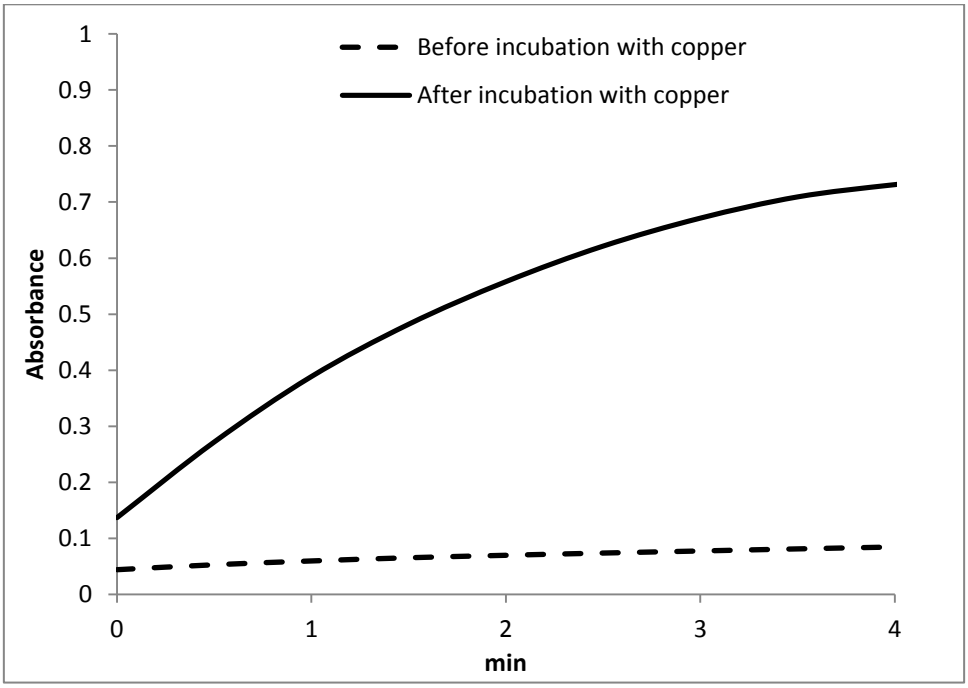

Fig. S1 Activity assays of *Sc*Lac before (dashed line) and after (solid line) incubation with 0.5 mM $CuSO_4$. We used 0.4 µM *Sc*Lac in the assays with DMP as the substrate. The reactions were followed for 4 min at 468 nm

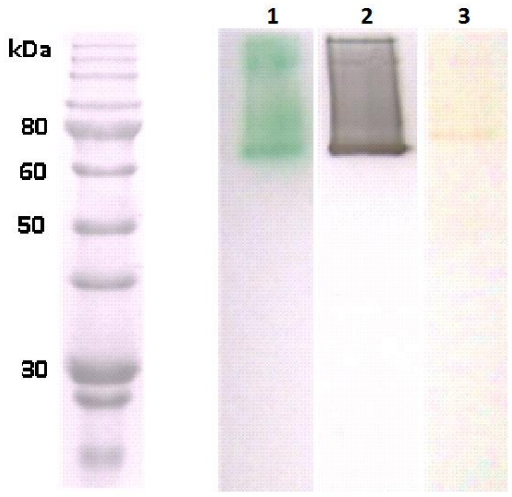

Fig. S2 Zymogram analysis of purified laccase expressed in *E. coli*. Native protein gel electrophoresis was carried out using 5–12% native-PAGE Tris-glycine gels loaded with 25 µg of laccase per lane. When the separation was completed, the gels were soaked in 10 mM ABTS (1), L-DOPA (2) or caffeic acid (3) prepared in 100 mM MES buffer (pH 5.5) and incubated at 37°C for 5 min. Reactions were stopped by exchanging the buffer with 1:1 ethanol-water (Ramachandra et al. 1987; Thomas et al. 1998). Molecular mass markers are shown on the left

References

Ramachandra M, Crawford DL, Pometto AL (1987) Extracellular enzyme-activities during lignocellulose degradation by *Streptomyces* Spp - A comparative-study of Wild-Type and genetically manipulated strains. Appl Environ Microbiol 53(12):2754-2760

Thomas M, Barker G, Furness PN (1998) A semi-quantitative approach to in situ zymography using tissue sections. J Pathol 186:4a-4a