Supplementary Materials: Chemo-enzymatic Synthesis of Chiral Epoxides Ethyl and Methyl (S)-3-(Oxiran-2-yl)propanoates from Renewable Levoglucosenone: An Access to Enantiopure (S)-Dairy Lactone

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Figure S1. $^1$H-NMR spectra for (S)-γ-hydroxymethyl-γ-butyrolactone (2). $^1$H 300 MHz in CDCl$_3$. 
Figure S2. $^{13}$C-NMR spectra for (S)-$\gamma$-hydroxymethyl-$\gamma$-butyrolactone (2). $^{13}$C 75 MHz in CDCl$_3$.

Figure S3. $^1$H-NMR spectra for (S)-$\gamma$-tosyloxyethyl-$\gamma$-butyrolactone (3a). $^1$H 300 MHz in CDCl$_3$. 
Figure S4. $^{13}$C-NMR spectra for (S)-γ-tosyloxymethyl-γ-butyrolactone (3a). $^{13}$C 75 MHz in CDCl₃.

Figure S5. $^1$H-NMR spectra for (S)-γ-mesyloxymethyl-γ-butyrolactone (3b). $^1$H 300 MHz in CDCl₃.
Figure S6. $^{13}$C-NMR spectra for (S)-γ-mesyloxymethyl-γ-butyrolactone (3b). $^{13}$C 75 MHz in CDCl₃.

Figure S7. $^1$H-NMR spectra for (S)-Methyl 4,5-epoxypentanoate (S)-1a crude. $^1$H 300 MHz in CDCl₃.
Figure S8. $^{13}$C-NMR spectra for (S)-Methyl 4,5-epoxypentanoate ((S)-1a) crude. $^{13}$C 75 MHz in CDCl₃.

Figure S9. $^1$H-NMR spectra for (S)-Ethyl 4,5-epoxypentanoate ((S)-1b) crude. $^1$H 300 MHz in CDCl₃.
Figure S10. $^{13}$C-NMR spectra for (S)-Ethyl 4,5-epoxypentanoate ((S)-1b) crude. $^{13}$C 75 MHz in CDCl$_3$.

Figure S11. $^1$H-NMR spectra for (S)-5-(Oct-2-yn-1-yl)-$\gamma$-Butyrolactone (5). $^1$H 300 MHz in CDCl$_3$. 
Figure S12. $^{13}$C-NMR spectra for (S)-5-(Oct-2-yn-1-yl)-γ-Butyrolactone (5). $^{13}$C 75 MHz in CDCl$_3$.

Figure S13. $^1$H-NMR spectra for (S)-Dairy lactone (6). $^1$H 300 MHz in CDCl$_3$.
Figure S14. $^{13}$C-NMR spectra for (S)-Dairy lactone (6). $^{13}$C 75 MHz in CDCl$_3$. 