

**Table S1. FTIR peak assignment**

Wavenumber [cm <sup>-1</sup> ]	Functional group and excitation
3000	Asymmetric CH stretching of CH <sub>3</sub>
2950	Symmetric CH stretching of CH <sub>3</sub>
2910	CH stretching vibration
2850	Symmetric C-H stretching
1750	Ester carbonyl (C=O) stretching
1460	Asymmetric CH <sub>3</sub> bending (deformation)
1390	Symmetric CH <sub>3</sub> bending (deformation)
1360	CH bending / CH <sub>3</sub> deformation
1260	C-O stretching and C-O-C asymmetric stretching (ester group)
1190	C-O-C asymmetric stretching
1120	C-O stretching of ester group
1090	C-O stretching
1040	C-O stretching and CH deformation
960	Amorphous PLA skeletal vibration
920	C-COO stretching / backbone vibration
870	CH <sub>3</sub> rocking
760	Crystalline-phase related skeletal vibration
700	Backbone deformation vibration

\*Based on ref. <sup>1-3</sup>

## References

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