Electronic Supplementary Information

One-pot Preparation of Polylactic acid-ibuprofen Conjugates

and Their Performance Characterization

Shi-He Luo,^{ab} Yan-Cheng Wu,^{ad} Liang Cao,^a Qun-Fang Wang,^a Shui-Xia Chen,^b* Zhi-Feng Hao,^c Le Jing^a and Zhao-Yang Wang^a*

a. School of Chemistry and Environment, South China Normal University; Key Laboratory of Theoretical Chemistry of Environment, Ministry of Education, Guangzhou 510006, P. R. China.
b. PCFM Lab, School of Chemistry and Chemical Engineering, Sun Yat-Sen University, Guangzhou 510275, P. R. China; Materials Science Institute, Sun Yat-Sen University, Guangzhou 510275, P. R. China.
c. School of Chemical Engineering and Light Industry, Guangdong University of Technology, Guangzhou 510006, P. R. China.
d. College of Materials Science and Engineering, South China University of Technology, Guangzhou 510641, P. R. China

Corresponding author E-mail: wangzy@scnu.edu.cn.; cescsx@mail.sysu.edu.cn.

Contents

Figure S1.	The ¹ H NMR spectrum of IBU	2
Figure S2.	The ¹ H NMR spectra of different feed ratios (LA/IBU)	3
Figure S3.	The calibration curve of IBU in CHCl ₃	4
Figure S4.	UV spectrum of ibuprofen in CHCl ₃ with 5 mg/mL	5
Figure S5.	UV spectra of a solution of PLA-IBU at various molar feed ratios in CHCl ₃	6
Figure S6.	UV spectra of IBU solution with various concentrations in PBS	7
Figure S7.	The calibration curve of IBU in PBS	8
Figure S8.	The drug release of PLA-IBU with different feed ratios (LA/IBU) in PBS	9
Figure S9.	The results of antibiogram assays with PLA-IBU 1	10



Figure S1. The ¹H NMR spectrum of IBU.



Figure S2. The ¹H NMR spectra of different feed ratios (LA/IBU).



Figure S3. The calibration curve of IBU in CHCl₃.



Figure S4. UV spectrum of ibuprofen in $CHCl_3$ with 5 mg/mL.



Figure S5. UV spectra of a solution of PLA-IBU at various molar feed ratios in CHCl₃.



Figure S6. UV spectra of IBU solution with various concentrations in PBS.



Figure S7. The calibration curve of IBU in PBS.



Figure S8. The drug release of PLA-IBU with different feed ratios (LA/IBU) in PBS.

Culturing for 0 h			Culturing for 18 h				
Negative	Positive	ρι λ	Negative	Positive	PLA-IBU	PLA-IBU	ΡΙ Δ
controls	controls	ILA	controls	controls	with 20	with 120	I LA
			2				
parallel test I	parallel test I	parallel test I	parallel test I	parallel test I	parallel test I	parallel test I	parallel test I
parallel test II	parallel test II	parallel test II	parallel test II	parallel test II	parallel test II	parallel test II	parallel test II
paraner test fi	paraner test fi	paraner test fi	paraner test fi	paraner test fi	paraner test fi	paraner test fi	paraner test fi
\bigcirc							
parallel test III	parallel test III	parallel test III	parallel test III	parallel test III	parallel test III	parallel test III	parallel test III

Figure S9. The results of antibiogram assays with PLA-IBU.