RSC Advances



CORRECTION

View Article Online
View Journal | View Issue



Cite this: RSC Adv., 2022, 12, 5280

Correction: Synthesis and stereocomplex formation of enantiomeric alternating copolymers with two types of chiral centers, poly(lactic acid-alt-2-hydroxybutanoic acid)s

Hideto Tsuji,* Kazuya Nakayama and Yuki Arakawa

DOI: 10.1039/d2ra90003c

rsc.li/rsc-advances

Correction for 'Synthesis and stereocomplex formation of enantiomeric alternating copolymers with two types of chiral centers, poly(lactic acid-alt-2-hydroxybutanoic acid)s' by Hideto Tsuji et al., RSC Adv., 2020, 10, 39000–39007. DOI: 10.1039/D0RA08351H.

In the original manuscript, incorrect weight- and number-average molecular weights ($M_{\rm w}$ and $M_{\rm n}$, respectively) were shown for the synthesized and used polymers in the 2. Experimental section. The correct $M_{\rm w}$ and $M_{\rm n}$ values of P(LLA-*alt*-L-2HB) and P(DLA-*alt*-D-2HB) were 3.00×10^4 , 3.08×10^4 , 1.53×10^4 , and 1.54×10^4 g mol⁻¹, respectively.

Due to the correction of the molecular weight values, the authors would like to remove the following statement regarding the suggested reason for the noncrystallizability of unblended P(LLA-alt-L-2HB) and P(DLA-alt-D-2HB) in the 3.2. Wide-angle X-ray diffractometry section based on the low molecular weight values: "The noncrystallizability of P(LLA-alt-L-2HB) and P(DLA-alt-D-2HB) may be due to their lower M_w values ($M_w = 3.0 \times 10^3$ and 3.1×10^3 , g mol⁻¹, respectively) compared to those of the P(LLA-co-L-2HB) (56/44) and P(DLA-co-D-2HB) (52/48) random copolymers ($M_w = 1.4 \times 10^4$ and $M_w = 1.6 \times 10^4$, g mol⁻¹, respectively) and P(LLA-alt-GA) alternating copolymers ($M_w = 4.8 \times 10^3$ and $M_w =$

Due to the same reason, in the 3.3. Differential scanning calorimetry section, the authors would like to remove the statement "The lower Tm values of P(LLA-alt-L-2HB) and P(DLA-alt-D-2HB) can be attributable to the low molecular weights compared to those of PLLA and PDLA, P(LLA-co-L-2HB) (56/44) and P(DLA-co-D-2HB) (52/48), and P(LLA-alt-GA) and P(DLA-alt-GA).". Additionally, the authors would like to replace the statement "The $T_{\rm m}$ values for P(LLA-alt-1-2HB)/P(DLA-alt-1-2HB) ($M_{\rm w}=3.0\times10^3$ and 3.1×10^3 , g mol⁻¹, respectively) blends are higher than those for solvent-evaporated and melt-crystallized ($T_c = 70 \,^{\circ}\text{C}$) P(L-2HB)/P(D-2HB) ($M_w = 100 \,^{\circ}\text{C}$) 1.8×10^3 and 3.3×10^3 , g mol⁻¹, respectively) homopolymer blends ($T_{\rm m} = 173.0$ and 172.1 °C, respectively)⁸¹ but lower than those for melt-crystallized ($T_c = 130$ °C) PLLA/PDLA ($M_w = 4.0 \times 10^3$ and 5.4×10^3 , g mol⁻¹, respectively) homopolymer blends ($T_m = 10^{-1}$) for melt-crystallized ($T_c = 130$ °C) PLLA/PDLA ($M_w = 4.0 \times 10^3$) and $M_w = 10^{-1}$, respectively) homopolymer blends ($M_w = 10^{-1}$) and $M_w = 10^{-1}$) are the first order to the following state of the first order to the first order 197.5 °C), ⁷⁸ and solvent-evaporated and melt-crystallized ($T_c = 160$ °C) P(LLA-co-L-2HB) (56/44)/P(DLA-co-D-2HB) (52/48) ($M_w = 1.4$ \times 10⁴ and 1.6 \times 10⁴, g mol⁻¹, respectively) random copolymer blends (203.6 and 198.4 °C), ⁶³ and solvent evaporated and meltcrystallized ($T_c = 100$ °C) P(LLA-alt-GA)/P(DLA-alt-GA) ($M_w = 4.8 \times 10^3$ and 5.9×10^3 , g mol⁻¹, respectively) blends (187.8 and 187.6 °C). 67" with the revised statement "The $T_{\rm m}$ values for P(LLA-alt-L-2HB)/P(DLA-alt-D-2HB) ($M_{\rm w}=3.0\times10^4$ and 3.1×10^4 g mol⁻¹, respectively) blends are lower than those for solvent-evaporated and melt-crystallized ($T_c = 70 \, ^{\circ}\text{C}$) P(L-2HB)/P(D-2HB) ($M_w = 10 \, ^{\circ}\text{C}$) $M_w = 10 \, ^{\circ}\text{C}$ 3.1×10^4 and 3.3×10^4 g mol⁻¹, respectively) homopolymer blends ($T_{\rm m} = 218.9$ and 214.5 °C, respectively)⁸¹ and those for meltcrystallized ($T_{\rm c}=130~{\rm ^{\circ}C}$) PLLA/PDLA ($M_{\rm w}=4.0\times10^3~{\rm and}~5.4\times10^3~{\rm g~mol}^{-1}$, respectively) homopolymer blends ($T_{\rm m}=197.5~{\rm ^{\circ}C}$), 78 and solvent-evaporated and melt-crystallized ($T_c = 160$ °C) P(LLA-co-L-2HB) (56/44)/P(DLA-co-D-2HB) (52/48) ($M_w = 1.4 \times 10^4$ and 1.6 × 10⁴ g mol⁻¹, respectively) random copolymer blends (203.6 and 198.4 °C)⁶³, but similar to those of solvent evaporated and meltcrystallized ($T_c = 100$ °C) P(LLA-alt-GA)/P(DLA-alt-GA) ($M_w = 4.8 \times 10^3$ and 5.9×10^3 g mol $^{-1}$, respectively) blends (187.8 and 187.6 °C).67".

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

Department of Applied Chemistry and Life Science, Graduate School of Engineering, Toyohashi University of Technology, Tempaku-cho, Toyohashi, Aichi 441-8580, Japan. E-mail: https://doi.org/10.1003/0.0004/japan.