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CORRECTION

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Correction: Synthesis and application of a highly branched, mechanism-based 2-deoxy-2-fluorooligosaccharide inhibitor of endo-xyloglucanases

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Correction for 'Synthesis and application of a highly branched, mechanism-based 2-deoxy-2-fluorooligosaccharide inhibitor of endo-xyloglucanases' by Namrata Jain et al., Org. Biomol. Chem., 2018, 16, 8732-8741.

The authors regret that the ¹H and ¹³C NMR chemical shift values for compounds 2, 4, and 5, as well as the ¹⁹F NMR values of compound 5, were incorrectly reported in the main text of the originally published version of the article. The correct data are listed below, including the original ¹⁹F NMR assignment for compound 4. The corresponding spectra were correctly displayed in the Electronic Supplementary Information (ESI) and remain unchanged by this correction.

Per-O-acetylated XXXG glycal (2):

¹H-NMR (Fig. S1,[†] 400 MHz, CDCl₃): δ 6.41 (d, I = 6.14 Hz, 1H, H1), 5.40–5.36 (m), 5.19–4.60 (m), 4.29–3.65 (m), 3.35 (d), 2.13-1.93 (54H, COCH₃). ¹³C-NMR (Fig. S2,[†] 100.6 MHz, CDCl₃): δ 170.34-168.64 (18 × CO), 145.58 (C1), 101.07-95.94 (C2, 6 × C1), 75.66–67.17 (6 × C2, 7 × C3, 7 × C4, 7 × C5), 61.77, 59.22, 59.06, 58.85 (4 × C6), 20.80–20.65 (18 × CH₃).

Per-O-acetylated 2'4'-dinitrophenyl β -glycoside of 2-deoxy-2-fluoro-XXXG (4):

¹H-NMR (Fig. S4,[†] 400 MHz, CDCl₃): δ 8.75 (d, 1H, H'3), 8.45 (dd, 1H, H'5), 7.42 (d, 1H, H'6), 5.56 (d, 1H, H1), 5.43–5.32 (m), 5.17–4.60 (m), 4.15–3.68 (m), 3.43 (d), 2.16–1.97 (54H, COCH₃). 13 C-NMR (Fig. S5,† 100.6 MHz, CDCl₃): δ 170.23–168.56 $(18 \times CO)$, 153.22 (C'3), 142.00 (C'4), 140.01 (C'5), 128.65 (C'1), 121.54 (C'2), 117.49 (C'6), 100.38-95.91 (7 × C1), 88.09 ($J_{C2-F2} = -20.000$) 189.0 Hz, C2), 75.22–67.32 (6 × C2, 7 × C3, 7 × C4, 7 × C5), 60.40, 59.09, 58.94, 58.74 (4 × C6), 21.05–20.58 (18 × CH₃). ¹⁹F-NMR (Fig. S6,† 376.5 MHz, CDCl₃): δ –194.75 (ddd, J_{H2-F2} = 47.7 Hz, J_{H3-F2} = 15.7 Hz, J_{H1-F2} = 2.5 Hz, F2).

2'4'-Dinitrophenyl β-glycoside of 2-deoxy-2-fluoro-XXXG (XXXG(2F)-β-DNP) (5):

¹H-NMR (Fig. S7,[†] 400 MHz, D₂O): δ 8.75 (d, 1H, H'3), 8.51 (dd, 1H, H'5), 7.67 (d, 1H, H'6), 5.66 (d, 1H, H1), 4.84–4.80 (m), 4.61-4.39 (m), 3.98-3.31 (m). ¹³C-NMR (Fig. S8,† 100.6 MHz, D₂O): δ 153.37 (C'3), 141.19 (C'4), 138.42 (C'5), 129.35 (C'1), 121.72 (C'2), 117.32 (C'6), 102.35–96.97 (7 × C1), 90.43 (J_{C2-F2} = 186.8 Hz, C2), 78.81–65.33 (6 × C2, 7 × C3, 7 × C4, 7 × C5), 61.93, 61.05, 61.00, 60.68 (4 × C6). Small amounts of CD₃OD (sep, 47.52) and CH₃COONa (181.02, 22.74) were also detected. ¹⁹F-NMR (Fig. S9,† 376.5 MHz, D₂O): δ –199.69 (ddd, $J_{\text{H2-F2}}$ = 51.4 Hz, $J_{\text{H3-F2}}$ = 15.2 Hz, $J_{\text{H1-F2}}$ = 2.5 Hz, F2).

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

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