# Supplementary Materials and Methods

## **Chemicals (synthesis, structure)**

Cpd-2 was prepared as described in Ning *et al.*a (MDP-1 compound). The preparation of Cpd-1 follows a similar route and is show below.

**Synthesis of *O*-(α-*D*-glucopyranosyl)-(1→4)-(α-*D*-glucopyranosyl)-(1→4)-β-*D*-glucopyranosyl-(1→1)-1-(3′-triazolepropyl perylene) (2*R*,3*S*,4*S*,5*S*,6*R*)-2-(((2*R*,3*S*,4*R*,5*S*,6*R*)-6-(((2*R*,3*S*,4*R*,5*S*,6*R*)-4,5-dihydroxy-2-(hydroxymethyl)-6-(3-(4-((perylen-3-ylmethoxy)methyl)-1*H*-1,2,3-triazol-1-yl)propoxy)tetrahydro-2*H*-pyran-3-yl)oxy)-4,5-dihydroxy-2-(hydroxymethyl)tetrahydro-2*H*-pyran-3-yl)oxy)-6-(hydroxymethyl)tetrahydro-2*H*-pyran-3,4,5-triol (1)**.

**(3*S*,4*S*,5*R*,6*R*)-6-(Acetoxymethyl)-5-(((2*R*,3*S*,4*S*,5*R*,6*R*)-3,4-diacetoxy-6-(acetoxymethyl)-5-(((2*R*,3*S*,4*S*,5*R*,6*R*)-3,4,5-triacetoxy-6-(acetoxymethyl)tetrahydro-2*H*-pyran-2-yl)oxy)tetrahydro-2*H*-pyran-2-yl)oxy)tetrahydro-2*H*-pyran-2,3,4-triyl triacetate (3).** An oven-dried round-bottom flask (100 mL) was cooled under a stream of argon and charged with maltotriose (4.96 mmol, 2.50 g, 1 equiv) and DMAP (9.91 mmol, 1.21 g, 2 equiv). Anhydrous pyridine (40 mL) was added and the resulting yellowish solution was cooled to 2-4 oC (crushed ice). Acetic anhydride (148.68 mmol, 15.18 g, 14.07 mL, 30 equiv) was added dropwise within 15 min, and the yellow solution was stirred at room temperature for 18 h under atmosphere of argon. The progress of the reaction was monitored by TLC (2:1 EtOAc/hexanes; visualization of TLC spots required immersing the TLC plate into a solution of sulfuric acid in ethanol (1:15 v:v) and subsequent drying the TLC plate with heat-gun). Upon complete conversion of the starting maltotriose, the yellow reaction mixture was concentrated under vacuum, the brown residue was diluted with EtOAc (100 mL) and washed with aqueous saturated NaHCO3 solution (50 mL) and then by water (100 mL). The aqueous layer was back-extracted with EtOAc (3x100 mL). Combined organic extracts were dried over Na2SO4, filtered and evaporated to dryness under vacuum. The residue was purified by column chromatography (Biotage SNAP KP-Sil 100 g; gradient elution from 25% EtOAc in petroleum ether to 100% EtOAc) to afford **3** as a white foam (3.95 g, 82%); analytical TLC on silica gel, 2:1 EtOAc/hexanes, R*f* = 0.52 (staining of TLC spots with the solution of sulfuric acid in ethanol (1:15 v:v) was used; see above). 1H NMR (CDCl3, 400 MHz,) *δ* 6.23 (0.5H, d, J=3.7 Hz, α-H) 5.73 (0.5H, d, J=8.1 Hz, β-H) 5.50 (1H, dd, J=10.1, 8.8 Hz) 5.42-5.39 (1H, m) 5.39-5.35 (1H, m) 5.34-5.30 (1H, m) 5.29-5.24 (1H, m) 5.05 (1H, td, J=10.1, 2.6 Hz) 4.97-4.92 (1H, m) 4.84 (1H, dd, J=10.5, 4.0 Hz) 4.73 (1H, dt, J=10.5, 4.0 Hz) 4.48-4.41 (2H, m) 4.32-4.26 (1H, m) 4.26-4.21 (1H, m) 4.18-4.13 (1H, m) 4.13-4.07 (1H, m) 4.06-4.02 (1H, m) 4.01-3.97 (1H, m) 3.96-3.92 (2H, m) 3.90-3.83 (1H, m) 2.22 (1.5H, s) 2.16 (1.5H, s) 2.15 (3H, s) 2.14-2.13 (3H, m) 2.09-2.08 (3H, m) 2.04 (3H, s) 2.02-2.01 (3H, m) 2.01-2.00 (3H, m) 1.99 (3H, s) 1.98 (3H, s) 1.98-1.97 (3H, m) 1.97 (3H, s). The 1H NMR spectrum was in agreement with that reported in the literature for a 1:1 mixture of α/β-anomersb. 13C NMR (101 MHz, CDCl3) *δ* 170.8, 170.7, 170.7, 170.7, 170.6, 170.6, 170.6, 170.6, 170.4, 170.4, 170.1, 170.0, 170.0, 169.9, 169.9, 169.9, 169.7, 169.6, 169.5, 169.1, 168.9, 96.1, 96.0, 95.8, 95.7, 91.4, 89.0, 77.2, 75.3, 73.6, 73.4, 73.1, 72.6, 72.4, 72.3, 71.9, 71.8, 71.1, 70.6, 70.6, 70.3, 70.2, 70.2, 69.8, 69.5, 69.2, 68.6, 68.0, 62.8, 62.7, 62.4, 62.3, 61.5, 61.5, 21.2, 21.1, 21.0, 21.0, 20.9, 20.8, 20.7, 20.7, 20.7, 20.6; HRMS-ESI (m/z) calcd for C40H54O27Na [M+Na]+ 989.2750, found 989.2750.

**(2*R*,3*R*,4*S*,5*S*,6*R*)-2-(Acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*)-4,5-diacetoxy-2-(acetoxymethyl)-6-hydroxytetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3,4,5-triyl triacetate (4).** Hydrazine acetate (4.84 mmol, 445 mg, 1.25 equiv) was added to a solution of peracetylated maltotriose **3** (3.87 mmol, 3.74 g, 1 equiv) in anhydrous DMF (40 mL) under atmosphere of argon and the resulting colorless solution was heated at 60 ºC for 18 hours. Progress of the reaction was monitored by TLC (2:1 EtOAc/hexanes; visualization of TLC spots required immersing the TLC plate into a solution of sulfuric acid in ethanol (1:15 v:v) and subsequent drying the TLC plate with heat-gun). Upon complete conversion the yellow reaction mixture was concentrated under vacuum. The residue was diluted with EtOAc (100 mL) and washed with water (50 mL), and then with brine (100 mL). The aqueous layer was back-extracted with EtOAc (3x100 mL). Organic layers were combined, dried over Na2SO4, filtered and concentrated to dryness under vacuum. The residue was purified by column chromatography (Biotage SNAP KP-Sil 100 g; gradient elution from 25% EtOAc in petroleum ether to 100% EtOAc) to afford **3** as a colorless oil. The oil was dissolved in dichloroethane and all volatiles were removed in vacuo. The dissolution/evaporation sequence was repeated two more times to afford the desired product **4** as a white foam (2.75 g, 77%); analytical TLC on silica gel, 2:1 EtOAc/hexanes, R*f* = 0.32 (staining of TLC spots with the solution of sulfuric acid in ethanol (1:15 v:v) was used; see above). 1H NMR (400 MHz, CDCl3) *δ* 5.57 (0.6H, dd, J=10.0, 8.8 Hz) 5.44-5.25 (5.4H, m) 5.09-5.03 (1H, m) 4.87-4.82 (1H, m) 4.79-4.72 (2H, m) 4.52-4.43 (2H, m) 4.34-4.14 (4H, m) 4.08-4.02 (1H, m) 4.00-3.90 (4H, m) 3.80-3.73 (0.4H, m, β–OH) 3.40-3.26 (0.6H, br s, α–OH) 2.18-2.16 (3H, m) 2.14 (3H, s) 2.09 (3H, s) 2.06-2.04 (6H, m) 2.03-2.01 (6H, m) 2.01-1.98 (9H, m). The 1H NMR spectrum was in agreement with that reported in the literature (a 3:2 mixture of α:β-anomers)c. 13C NMR (101 MHz, CDCl3) *δ* 170.9, 170.9, 170.8, 170.7, 170.7, 170.7, 170.5, 170.5, 170.4, 170.1, 170.0, 170.0, 169.8, 169.6, 95.8, 95.8, 95.8, 95.1, 90.2, 77.2, 74.8, 74.0, 73.8, 72.7, 72.6, 72.6, 72.4, 71.9, 71.8, 71.7, 70.6, 70.2, 69.5, 69.2, 69.1, 68.6, 68.1, 67.9, 67.2, 63.2, 63.1, 62.4, 61.5, 21.1, 21.0, 21.0, 21.0, 20.9, 20.8, 20.8, 20.7; HRMS-ESI (m/z) calcd for C38H52O26Na [M+Na]+ 947.2645, found 947.2664.

**(*2R,*3*R*,4*S*,5*S*,6*R*)-2-(Acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(2,2,2-trichloro-1-iminoethoxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3,4,5-triyl triacetate (5).** Anhydrous K2CO3 (25.95 mmol, 3.59 g, 10 equiv) was added to a colorless solution of maltotriose **4** (2.60 mmol, 2.40 g, 1 equiv) and trichloroacetonitrile (25.95 mmol, 3.75 g, 2.60 mL, 10 equiv) in anhydrous CH2Cl2 (50 mL). The resulting yellowish suspension was stirred at ambient temperature for 18 h, and progress of the reaction was monitored by TLC (2:1 EtOAc/hexanes; visualization of TLC spots required immersing the TLC plate into a solution of sulfuric acid in ethanol (1:15 v:v) and subsequent drying the plate with heat-gun). Upon complete conversion of the starting maltotriose **3**, the yellow suspension was diluted with water (200 mL). Layers were separated and the aqueous layer was back-extracted with CH2Cl2 (3x100 mL). Combined organic layers were dried over Na2SO4, filtered and concentrated under vacuum. The yellow oily residue was purified by column chromatography (Biotage SNAP KP-Sil 100 g; gradient elution from 25% EtOAc/petroleum ether to 100% EtOAc) to afford the target product **5** as a colorless oil. The oil was dissolved in dichloroethane and all volatiles were removed in vacuo. The dissolution/evaporation sequence was repeated two more times to afford the desired product **5** as a white foam (2.25 g, 81%); analytical TLC on silica gel, 2:1 EtOAc/hexanes, R*f* = 0.57 (staining of TLC spots with the solution of sulfuric acid in ethanol (1:15 v:v) was used; see above). 1H NMR (400 MHz, CDCl3) *δ* 8.67 (1H, s) 6.48 (1H, d, J=3.8 Hz) 5.59 (1H, dd, J=10.0, 8.8 Hz) 5.44-5.39 (2H, m) 5.35 (1H, dd, J=10.5, 9.5 Hz) 5.30 (1H, d, J=4.0 Hz) 5.07 (1H, dd, J=10.2, 9.5 Hz) 5.02 (1H, dd, J=9.8, 3.8 Hz) 4.85 (1H, dd, J=10.5, 4.0 Hz) 4.76 (1H, dd, J=10.2, 4.0 Hz) 4.54-4.46 (2H, m) 4.31-4.23 (2H, m) 4.22-4.14 (2H, m) 4.08-4.00 (2H, m) 3.97-3.90 (3H, m) 2.16 (3H, s) 2.15 (3H, s) 2.10 (3H, s) 2.06 (3H, s) 2.04 (3H, s) 2.03 (3H, s) 2.02-2.01 (6H, m) 1.99 (3H, s) 1.98 (3H, s); 13C NMR (101 MHz, CDCl3) *δ* 170.8, 170.7, 170.6, 170.5, 170.4, 170.1, 169.9, 169.8, 169.7, 169.6, 161.1, 96.2, 95.8, 92.9, 90.9, 77.2, 73.5, 72.6, 71.9, 71.9, 70.7, 70.6, 70.2, 69.5, 69.2, 68.6, 68.0, 62.5, 62.3, 61.5, 21.1, 21.0, 21.0, 20.9, 20.8, 20.7, 20.5; IR (film, cm−1) 1748 (C=O) 1234 (C-O-C) 1035 (C-O-C); [α]20D+109.8 (*c* 1.01, CHCl3); HRMS-ESI (m/z) calcd for C40H52NO26NaCl3 [M+Na]+ 1090.1741, found 1090.1760.

**(2*R*,3*R*,4*S*,5*S*,6*R*)-2-(Acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(((*2R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(3-azidopropoxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3,4,5-triyl triacetate (6)**. 4Å Molecular sieves (1 g) were added to a colorless solution of trichloroacetimidate **5** (0.94 mmol, 1.0 g, 1 equiv) and 3-azido-1-propanol (3.74 mmol, 380 mg, 345 µl, 4 equiv) in anhydrous CH2Cl2 (30 mL). The resulting suspension was cooled to 2–4 oC (crushed ice) and TMSOTf (0.25 M solution in CH2Cl2, 1.17 mmol, 260 mg, 212 µl, 1.25 equiv) was added dropwise within 30 min. The colorless solution was stirred at 2–4oC for 2 h, and progress of the reaction was monitored by TLC (2:1 EtOAc/hexanes; visualization of TLC spots required immersing the TLC plate into a solution of sulfuric acid in ethanol (1:15 v:v). Upon complete conversion of the starting trichloroacetimidate **5**, the reaction mixture was quenched with NEt3 (2.34 mmol, 237 mg, 325 µl, 2.5 equiv) at 2–4oC and warmed to room temperature within 10 min. Water (150 mL) was then added and layers were separated. The aqueous layer was back-extracted with CH2Cl2 (3x50 mL). Combined organic layers were dried over Na2SO4, filtered and concentrated in vacuo. The residue was purified by column chromatography (Biotage SNAP KP-Sil 50 g; gradient elution from 10% EtOAc in petroleum ether to 100% EtOAc) to afford the desired azide **6** as a white foam (375 mg, 39%); analytical TLC on silica gel, R*f* = 0.65, 2:1 EtOAc/hexanes (staining of TLC spots with the solution of sulfuric acid in ethanol (1:15 v:v) was used; see above). 1H NMR (400 MHz, CDCl3) *δ* 5.41-5.31 (3H, m) 5.27-5.22 (2H, m) 5.06 (1H, dd, J=10.2, 9.5 Hz) 4.85 (1H, dd, J=10.5, 4.1 Hz) 4.80 (1H, dd, J=9.5, 7.9 Hz) 4.73 (1H, dd, J=10.5, 4.1 Hz) 4.52 (1H, d, J=7.9 Hz) 4.46 (2H, ddd, J=11.0, 8.9, 2.5 Hz) 4.30 (1H, dd, J=12.0, 4.2 Hz) 4.24 (1H, dd, J=12.4, 3.6 Hz) 4.17 (1H, dd, J=12.4, 3.6 Hz) 4.04 (1H, dd, J=12.5, 2.5 Hz) 4.00-3.89 (5H, m) 3.73-3.68 (1H, m) 3.62-3.56 (1H, m) 3.41-3.31 (2H, m) 2.16 (3H, s) 2.14 (3H, s) 2.09 (3H, s) 2.04 (3H, s) 2.02 (3H, s) 2.02-2.00 (6H, m) 2.00-1.98 (6H, m) 1.98 (3H, s) 1.87-1.78 (2H, m); 13C NMR (101 MHz, CDCl3) *δ* 170.7, 170.7, 170.7, 170.6, 170.5, 170.2, 170.0, 169.8, 169.8, 169.6, 100.4, 95.9, 95.8, 77.2, 75.4, 73.9, 72.6, 72.3, 72.3, 71.9, 70.6, 70.2, 69.5, 69.1, 68.6, 68.0, 66.6, 63.0, 62.5, 61.5, 48.1, 29.1, 21.0, 21.0, 20.9, 20.8, 20.8, 20.7, 20.7, 20.7; IR (film, cm−1) 2101 (N3) 1756 (C=O) 1234 (C-O-C) 1039 (C-O-C); [α]20D+76.9 (*c* 1.64, CHCl3); HRMS-ESI (m/z) calcd for C41H57N3O26Na [M+Na]+ 1030.3128, found 1030.3123.

**(2*R*,3*R*,4*S*,5*S*,6*R*)-2-(Acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(((2*R*,3*R*,4*S*,5*S*,6*R*)-4,5-diacetoxy-2-(acetoxymethyl)-6-(3-(4-((perylen-3-ylmethoxy)methyl)-1*H*-1,2,3-triazol-1-yl)propoxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2*H*-pyran-3-yl)oxy)tetrahydro-2H-pyran-3,4,5-triyl triacetate (8)**. To a mixture of azide **5** (0.298 mmol, 300 mg, 1 equiv), 3-prop-2-ynyloxymethyl-perylene **7** (0.595 mmol, 191 mg, 2 equiv) and CuI (0.030 mmol, 6 mg, 10 mol%, 0.1 equiv) in an oven-dried pressure vial (20 mL) was added anhydrous DMF (10 mL) and DIPEA (0.595 mmol, 77 mg, 106 µl, 2 equiv). The resulting yellow solution was stirred at room temperature for 18 hours under atmosphere of argon, and progress of the reaction was monitored by TLC (2:1 EtOAc/hexanes; visualization of TLC spots required immersing the TLC plate into a solution of sulfuric acid in ethanol (1:15 v:v). Upon complete conversion of the starting azide **6**, the yellow reaction mixture was concentrated under vacuum. The yellowish oily residue was diluted with EtOAc (50 mL) and washed with brine (100 mL). The aqueous layer was back-extracted with EtOAc (3x50 mL). Combined organic layers were dried over Na2SO4, filtered and evaporated to dryness under vacuum. The residue was purified by column chromatography (Biotage SNAP KP-Sil 25 g; gradient elution from 25% EtOAc/petroleum ether to 100% EtOAc) to afford triazole **8** as a yellow foam (310 mg, 78%); analytical TLC on silica gel, 1:1 EtOAc/hexanes, R*f* = 0.30. 1H NMR (400 MHz, CDCl3) *δ* 8.25-8.12 (4H, m) 7.95-7.91 (1H, m) 7.71-7.66 (2H, m) 7.56-7.45 (5H, m) 5.44-5.39 (2H, m) 5.37 (1H, dd, J=10.5, 9.4 Hz) 5.26 (1H, d, J=4.1 Hz) 5.21 (1H, dd, J=9.4, 8.8 Hz) 5.07 (1H, dd, J=10.2, 9.4 Hz) 5.00 (2H, s) 4.86 (1H, dd, J=10.5, 4.1 Hz) 4.81-4.71 (4H, m) 4.49-4.31 (5H, m) 4.28-4.14 (3H, m) 4.05 (1H, dd, J=12.5, 2.4 Hz) 3.98-3.89 (4H, m) 3.79-3.71 (1H, m) 3.61-3.55 (1H, m) 3.44-3.36 (1H, m) 2.14 (3H, s) 2.14 (3H, s) 2.13-2.07 (5H, m) 2.05 (3H, s) 2.04-2.02 (6H, m) 2.01-2.00 (6H, m) 2.00 (3H, s) 1.98 (3H, s); 13C NMR (101 MHz, CDCl3) *δ* 170.8, 170.7, 170.7, 170.5, 170.5, 170.2, 170.0, 169.9, 169.9, 169.6, 145.3, 134.8, 133.2, 133.2, 131.7, 131.7, 131.3, 131.2, 129.1, 128.6, 128.1, 128.1, 127.7, 127.0, 126.8, 126.7, 124.1, 123.1, 120.6, 120.5, 119.7, 100.3, 95.9, 95.8, 77.2, 75.3, 73.7, 72.6, 72.3, 72.2, 71.9, 71.3, 70.6, 70.2, 69.5, 69.1, 68.6, 68.0, 66.0, 64.0, 62.8, 62.4, 61.5, 46.8, 30.3, 21.1, 21.0, 20.9, 20.8, 20.8, 20.7, 20.7; IR (film, cm−1) 1755 (C=O) 1236 (C-O-C) 1043 (C-O-C); [α]20D+57.7 (*c* 0.51, CHCl3) HRMS-ESI (m/z) calcd for C65H74N3O27 [M+H]+ 1328.4510, found 1328,4524.

**(2*R*,3*S*,4*S*,5*S*,6*R*)-2-(((2*R*,3*S*,4*R*,5*S*,6*R*)-6-(((2*R*,3*S*,4*R*,5*S*,6*R*)-4,5-Dihydroxy-2-(hydroxymethyl)-6-(3-(4-((perylen-3-ylmethoxy)methyl)-1*H*-1,2,3-triazol-1-yl)propoxy)tetrahydro-2*H*-pyran-3-yl)oxy)-4,5-dihydroxy-2-(hydroxymethyl)tetrahydro-2*H*-pyran-3-yl)oxy)-6-(hydroxymethyl)tetrahydro-2*H*-pyran-3,4,5-triol (1)**. Aqueous lithium hydroxide (1M solution in water, 7.00 mmol, 294 mg, 30 equiv) was added to a solution of triazole **8** (0.233 mmol, 310 mg, 1 equiv) in MeOH (30 mL), and the resulting yellow solution was stirred for 18 hours at room temperature under atmosphere of argon. All volatiles were removed in vacuo and the crude product was purified by reversed–phase column chromatography (Biotage SNAP KP-C18-HS 30 g; gradient elution from 100% water to 80% MeCN in water) to afford the desired **1** as a yellow powder (145 mg, 68%). 1H NMR (400 MHz, DMSO-d*6*) *δ* 8.41-8.30 (4H, m) 8.18 (1H, s) 7.92-7.88 (1H, m) 7.82-7.77 (2H, m) 7.61-7.52 (4H, m) 5.62-5.54 (2H, m) 5.53-5.46 (2H, m) 5.24 (1H, d, J=4.9 Hz) 5.02 (2H, dd, J=11.0, 3.8 Hz) 4.93 (2H, s) 4.91-4.87 (2H, m) 4.69 (2H, s) 4.57-4.44 (5H, m) 4.17 (1H, d, J=7.7 Hz) 3.80-3.73 (1H, m) 3.72-3.54 (7H, m) 3.53-3.36 (6H, m) 3.38-3.34 (2H, m, overlapped with water) 3.27-3.20 (2H, m) 3.11-3.02 (2H, m) 2.11-2.04 (2H, m); 13C NMR (101 MHz, CDCl3) *δ* 143.7, 134.2, 133.6, 132.5, 130.8, 130.5, 130.5, 130.3, 128.1, 128.0, 127.6, 127.3, 127.0, 126.9, 124.3, 124.1, 120.8, 120.8, 120.7, 120.1, 102.7, 100.8, 100.6, 79.8, 79.5, 79.2, 76.2, 75.1, 73.5, 73.3, 73.2, 73.0, 72.6, 72.0, 71.7, 69.9, 69.6, 65.4, 63.0, 60.8, 60.5, 60.3, 46.4, 39.5, 30.0; IR (film, cm−1) 3434 (CH-O-H) 1027 (C-O-C); [α]20D+51.5 (*c* 0.98, DMSO); HRMS-ESI (m/z) calcd for C45H54N3O17 [M+H]+ 908.3453, found 908.3447.

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b. Koto S, Haigoh H, Shichi S, Hirooka M, Nakamura T, Maru C, Fujita M, Goto A, Sato T, Okada M, et al. (1995) Synthesis of glucose-containing linear oligosaccharides having α(1→4) and α(1→6) linkages using stereoselective dehydrative glycosylation. *Bull Chem Soc Jpn* **68**: 2331–2348.

c. Wang R, Chen J-Z, Zheng X-A, Kong R, Gong S-S, Sun Q (2018) Hafnium (IV) triflate as a potent catalyst for selective 1-O-deacetylation of peracetylated saccharides. *Carbohydr Res* **455**: 114–118.