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Correction: Trehalose-cored amphiphiles for membrane protein stabilization: importance of the detergent micelle size in GPCR stability

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Correction for 'Trehalose-cored amphiphiles for membrane protein stabilization: importance of the detergent micelle size in GPCR stability' by Manabendra Das *et al.*, *Org. Biomol. Chem.*, 2019, **17**, 3249–3257.

The authors regret that there were errors in the chemical structures of the amphiphiles in Fig. 2a and 3a. All the sugar units of TCG-C5 to TCM-C10 are identical (*i.e.* β -D-glucose for TCG-C5 to TCG-C7 and β -D-maltose for TCM-C8 to TCM-C10). The correct figures are shown below.

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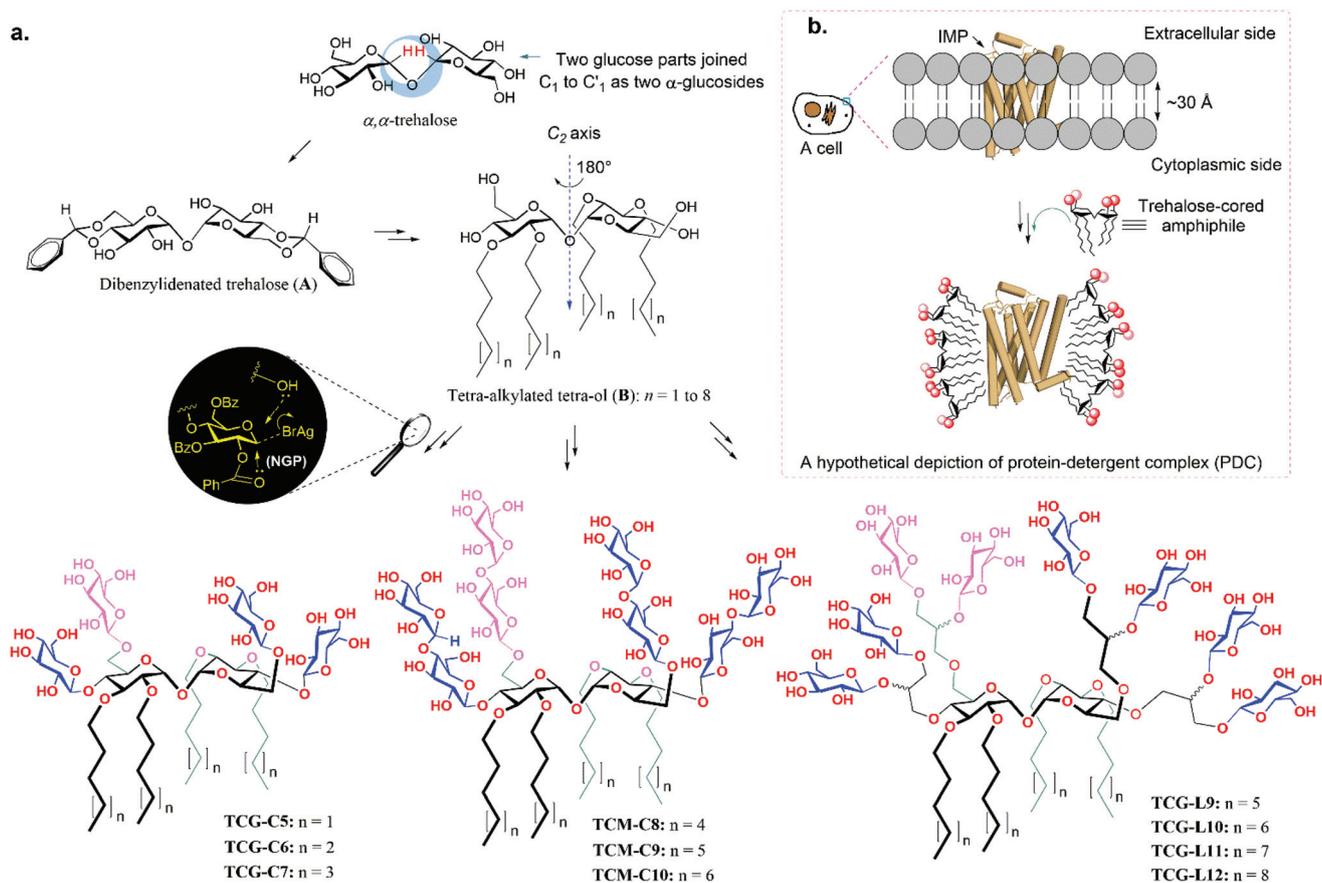


Fig. 2 (a) Synthetic scheme and chemical structures of newly prepared trehalose-cored amphiphiles (TCGs/TCMs/TCG-Ls). Novel amphiphiles were derived from α,α -trehalose via dibenzylidened trehalose (A) and tetra-alkylated tetra-ol intermediates (B). The tetra-alkylated tetra-ol intermediates and TCGs/TCMs/TCG-Ls contain a C₂ axis passing through the central part of the molecules, indicated by the blue dotted line on the chemical structures of the tetra-ol intermediate. The inset within circle (black) illustrates a known mechanism of β -selective glycosylation involving neighboring group participation (NGP). (b) Schematic representation of a membrane protein interacting with one of the new detergents following extraction from the membrane.

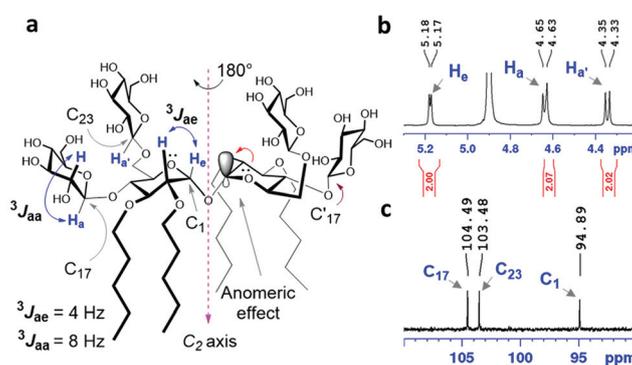


Fig. 3 (a) The chemical structure of TCG-C5 is given to illustrate the axial anomeric protons (H_a and $H_{a'}$) and equatorial anomeric protons (H_e) and their couplings with the neighboring protons (H in blue color). (b) Partial 1H NMR spectrum of TCG-C5 showing its high anomeric purity. The NMR spectrum of TCG-C5 gave two doublets at 4.64 and 4.34 ppm, along with a coupling constant ($^3J_{aa}$) of 8.0 Hz, typical peak characteristics of β -anomeric protons. TCG-C5 also contains α -anomeric proton (H_e), giving doublets at 5.18 ppm with a reduced coupling constant ($^3J_{ae} = 4.0$ Hz). (c) A partial ^{13}C NMR spectrum of TCG-C5. Only anomeric carbon signals for TCG-C5 are assigned.

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

