Supplementary Material (ESI)

Cubosome particles of a novel Guerbet branched chain glycolipid

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Figure S1. “Partial binary phase diagrams of the four compounds in the heating direction. (B) β -Glc-OC₁₀C₆/ water. Various phases identified from the SAXS data are marked on the phase diagrams (i.e., blue ●) to denote the L₂ inverse micellar solution: (orange ●) (L _{α}), (×) (Q_{II}^G), (green ◆) (Q_{II}^D), and (blue ▲) (H_{II}). The coexistence of phases is also marked by combining these notations, thus (orange ● with ×) (L _{α} + Q_{II}^G), (green ◆ with ×) (Q_{II}^G + Q_{II}^D), (blue ▲ with ×) (H_{II} + Q_{II}^G), and (blue ▲ with overlaid green ◆) (H_{II} + Q_{II}^D). Polarizing microscopy results are shown in the shaded areas, denoting five distinct regions: anisotropic, viscous isotropic, anisotropic + viscous isotropic, viscous isotropic + water, and anisotropic + water. The excess water points are represented by dashed lines. (B) A stable Ia3d cubic phase was observed in the excess water region.” (Reprinted with permission from (Zahid NI, Conn CE, Brooks NJ, *et al.*. Investigation of the Effect of Sugar Stereochemistry on Biologically Relevant Lyotropic Phases from Branched-Chain Synthetic Glycolipids by Small-Angle X-ray Scattering. *Langmuir*. 2013;29:15794-804.) Copyright (2013) American Chemical Society.)

Figure S2. SAXS diffraction pattern of dispersed β -Glc-OC₁₀C₆/1 wt% P407 after water background subtraction.