**Supporting Information**

Hierarchical co-assembly of chiral lipid nanotube with azobenzene derivative: optical and chiroptical switch

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**Fig. S1** AFM Section analysis of A) nanotube I, B) exposed to UV light for 15 min and C) subsequent visible light for another 15 min, and D) nanotube II, E) nanotube II exposed to UV light for 15 min and F) visible light for another 15 min. The HDGA molecule used in both the above cases is L- type. All of the images are 500 nm × 500 nm. The number list below each curve is the surface distance and the number of pitches.
Fig. S2 SEM images of A) nanotube I and B) nanotube II.

The as-prepared samples were cast on silicon wafers for scanning electron microscopy (SEM) measurements. Before SEM measurement, the sample surface was coated with a thin layer of Au to increase the contrast. SEM was performed on a Hitachi S-4800 FE-SEM.

Fig. S3 FT-IR spectra of (a) the HDGA xerogel, (b) nanotube I and (c) nanotube II. Insert: the expanded IR spectra between 1650 cm\(^{-1}\) and 1710 cm\(^{-1}\). The mole ratio of Azo to HDGA is 1:6 in preparing nanotube I and nanotube II.