

Electronic Supplementary Information (ESI)

Preparation and photo-induced activities of water-soluble amyloid β -C₆₀ complexes

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1. Figures

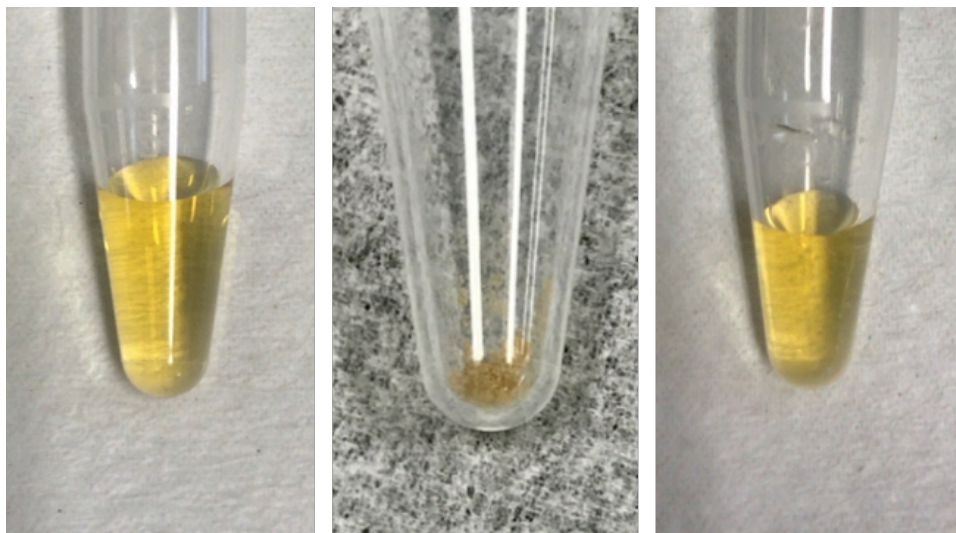


Fig. S1. Photograph of A β 40-C₆₀ in aqueous solution (A), as a powder prepared by lyophilization (B), and aqueous solution in which powder (B) was redissolved (C).

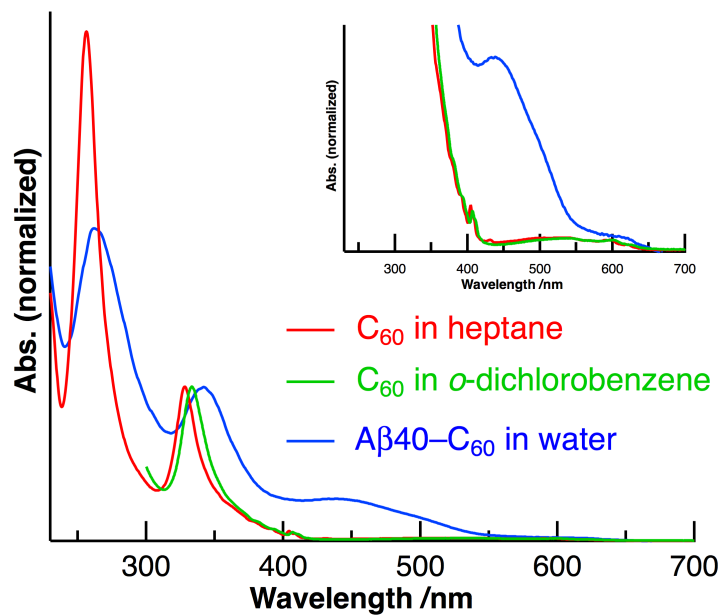


Fig. S2. Absorption spectrum of Aβ₄₀-C₆₀ in water (blue), together with absorption spectra of C₆₀ in heptane (red) and in *o*-dichlorobenzene (green). Since *o*-dichlorobenzene has strong absorption in the UV region, the absorption spectrum of C₆₀ cannot be observed in *o*-dichlorobenzene in the region less than 300 nm. The peak intensities were normalized to the band at around 340 nm. The expansion to show the absorption in the visible region is shown in inset.

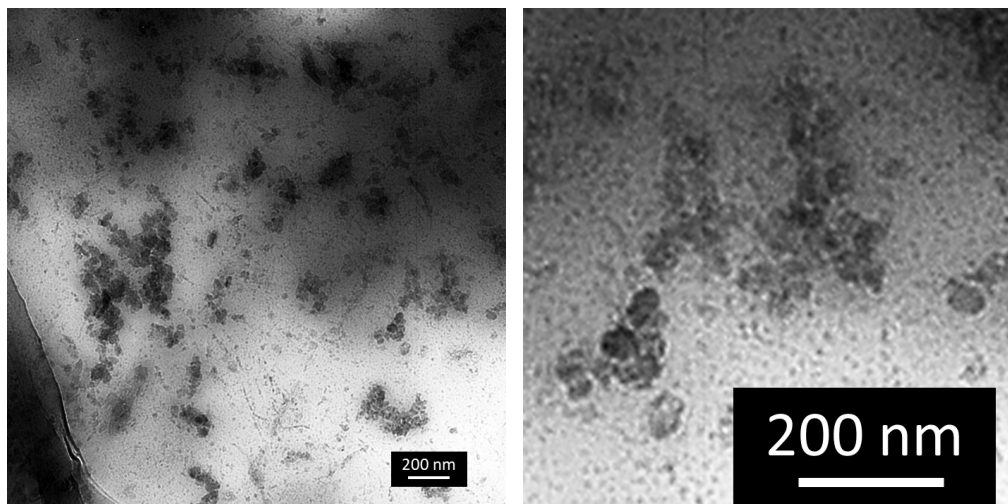


Fig. S3. TEM images of Aβ40-C₆₀.

(A)

DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVV

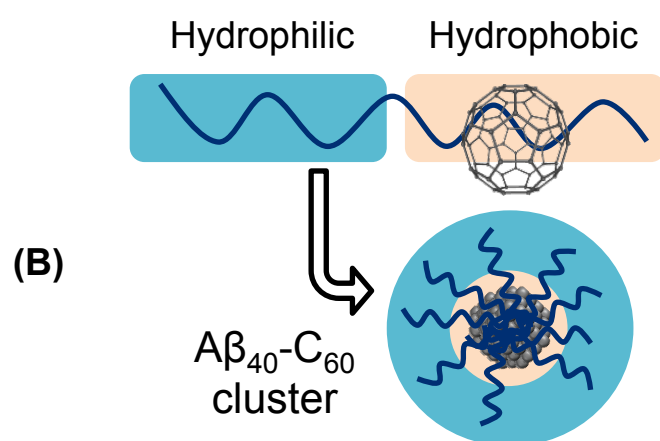


Fig. S4. (A) Sequence of A β 40 in which hydrophilic residues are underlined and (B) schematic view of A β 40-C₆₀.

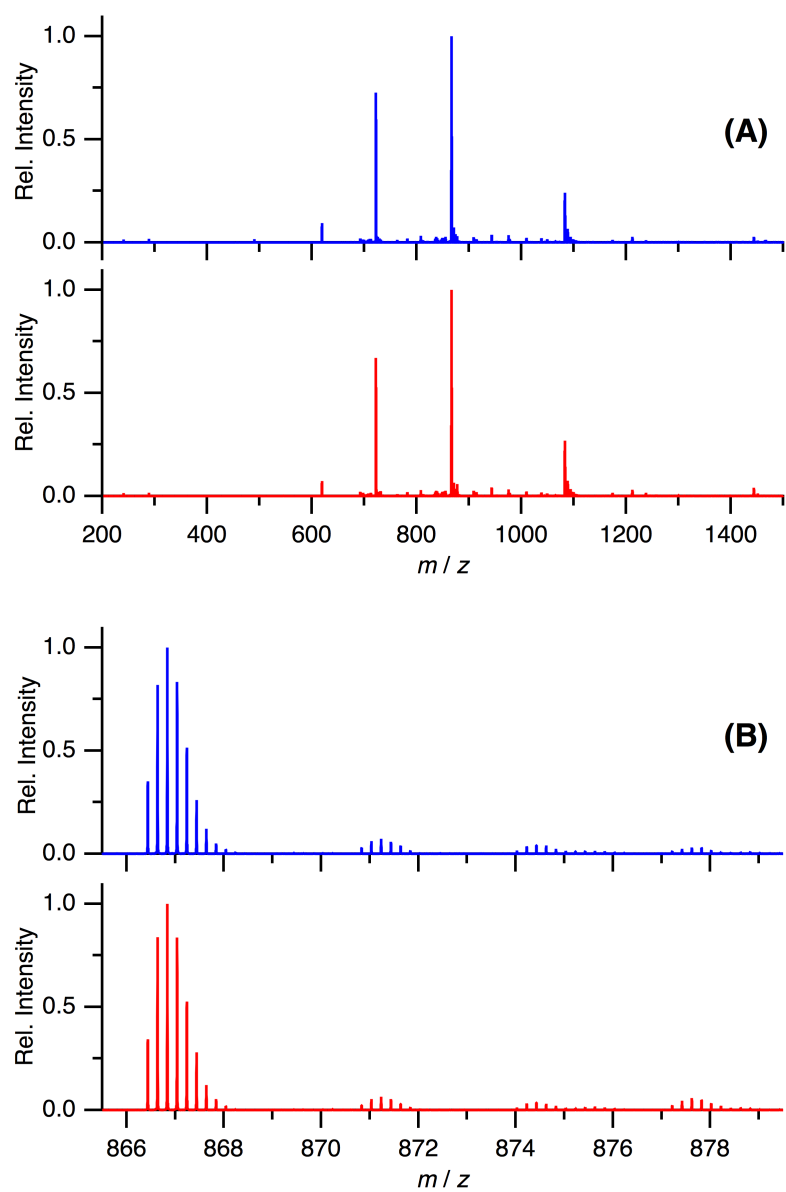


Fig. S5. ESI-mass spectra of Aβ40 only without (blue) and with (red) photoirradiation at m/z 200–1500 (A) and 865.5–879.5 (B).

2. Author Contributions

T.N. conceived and conducted the research. N.H. and M.K. carried out the experiments and analyzed the data. H.H. prepared the peptides. T.N., N.H. and H.H. wrote the manuscript.