

Supporting Information for

**Nanoscale Vesicles Assembled from Non-Planar Cyclic Molecules for
Efficient Cell Penetration**

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Instrumentation

High resolution mass spectrometry (HR-MS) analyses were carried out using MALDI-TOF-MS techniques. The matrix used for MALDI was a solution of 10 mg/ml of 7,7,8,8-tetracyanquinodimethane in THF with 1% silver trifluoroacetate as a promoter. Mass spectrometry of CPP and CPP derivatives could also be obtained without matrix. ^1H NMR spectra and ^{13}C NMR spectra were recorded at 300 MHz on a Bruker DXP-300 or at 400 MHz on a Bruker DQX-400. Chemical shifts for ^1H NMR are shown in parts per million (ppm) relative to CDCl_3 (δ 7.26 ppm). Chemical shifts for ^{13}C NMR are expressed in ppm relative to CDCl_3 (δ 77.0 ppm). UV absorption spectra were recorded on a Shimadzu UV-2401 spectrophotometer. Fluorescence emission and excitation spectra were measured on a Horiba FluoroMax-4 spectrofluorometer. Cryogenic transmission electronmicroscopy (cryo-TEM) images were captured on FEI T20 electron microscope. Transmission electron microscopy (TEM) images were captured on a JEM-1011 electron microscope. Hydrodynamic diameter was measured by dynamic light scattering (DLS) using a Brookhaven Nano brook omni with a He-Ne laser ($\lambda = 633$ nm) as the incident beam. Laser scanning confocal images were collected on LSM-710 (Zeiss Inc., Germany).

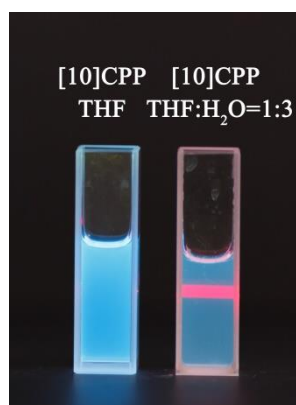


Fig S1. Digital photographs of [10]CPP assemblies in THF and THF/ H_2O mixed solvent. Each sample was irradiated with 365 nm light from the front and red laser on the right side. Tyndall effect of CPP in THF/ H_2O mixed solution can be observed.

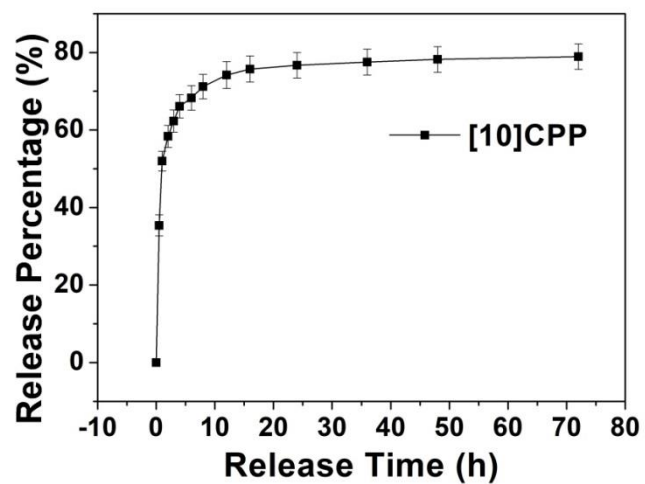


Fig S2. In vitro release profiles of Rhodamine B-loaded [10]CPP vesicles in THF/H₂O=1/3 solution.

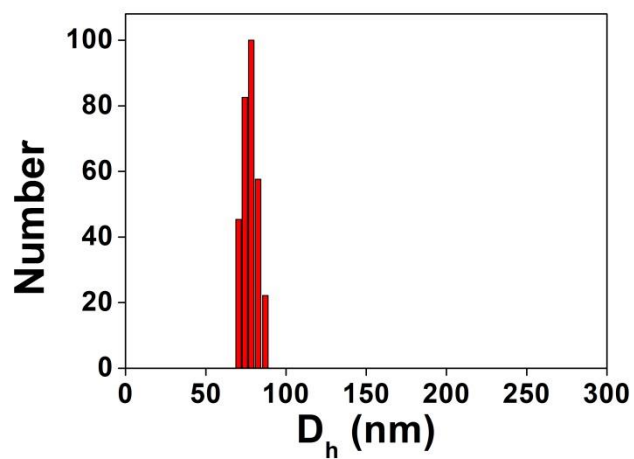


Fig S3. Size distribution of [10]CPP at the concentration of 1×10^{-5} M in DMSO/PBS (pH 7.4, 1/99, v/v) at the temperature of 37 °C.

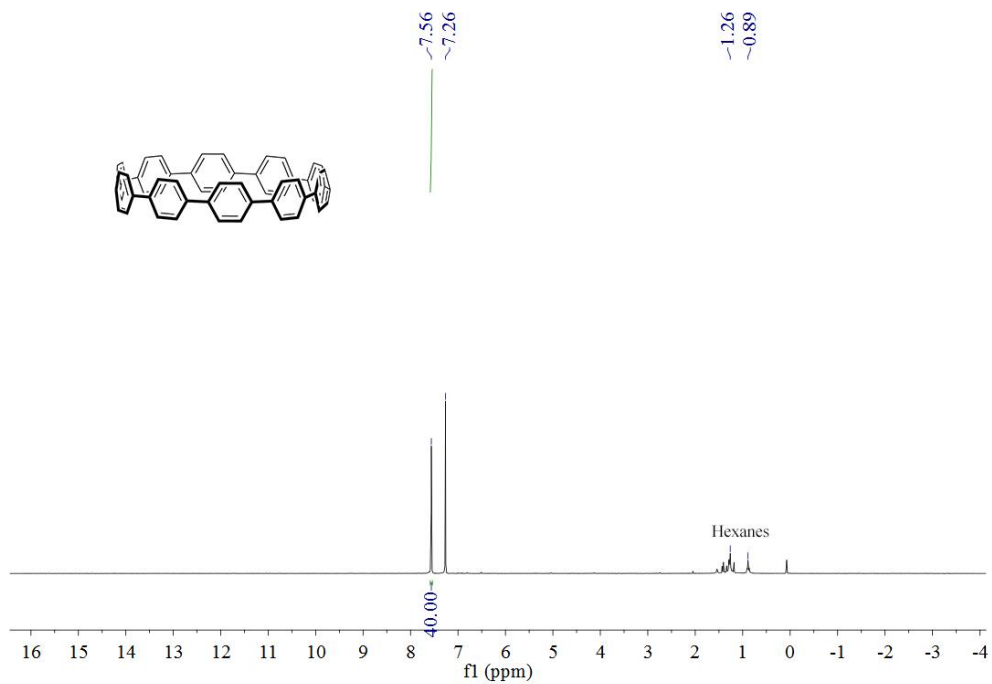


Fig S4. ^1H NMR spectra of [10]CPP.

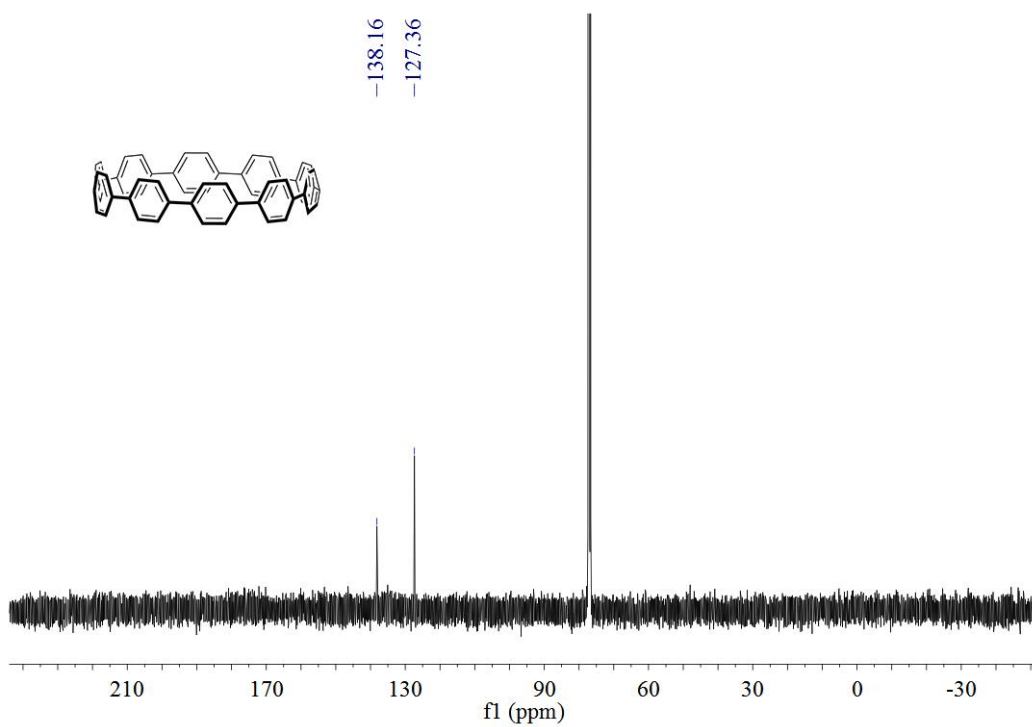


Fig S5. ^{13}C NMR spectra of [10]CPP.

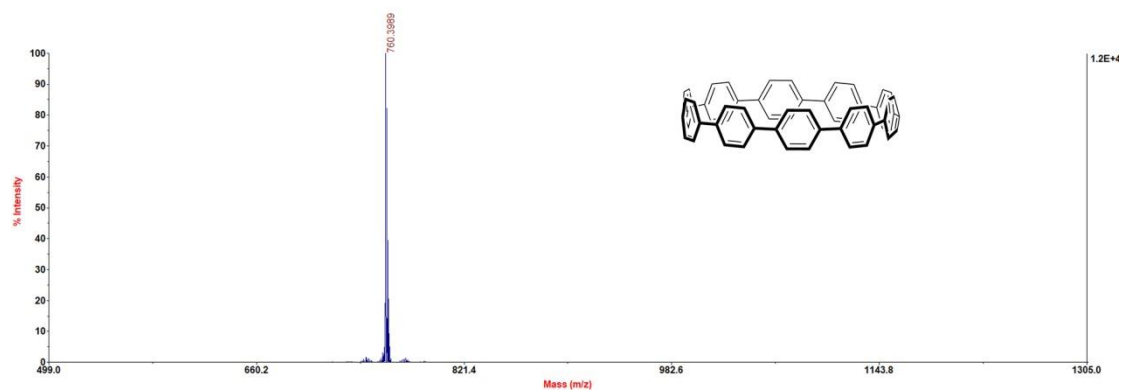


Fig S6. MALDI-TOF spectra of [10]CPP.