

Supporting Information(SI)

A novel biocompatible zwitterionic polyurethane with AIE effect for cell imaging in living cells†

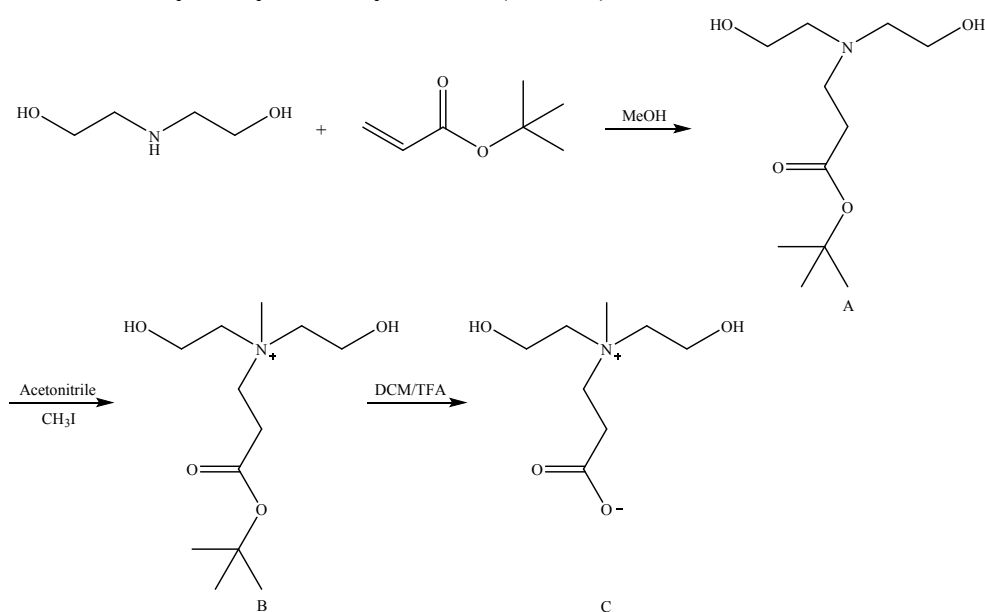
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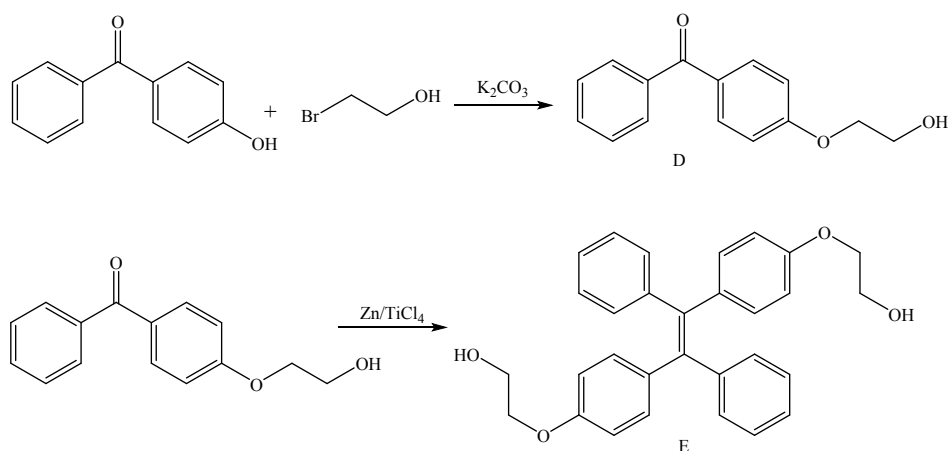
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Synthesize of dihydroxy carboxybetaine (DHCB)



Scheme S1 the detailed synthetic route of DHCB.

Synthesize of HO-TPE-OH



Scheme S2 the detailed synthetic route of HO-TPE-OH.

The ^1H NMR of tBu-DHCB

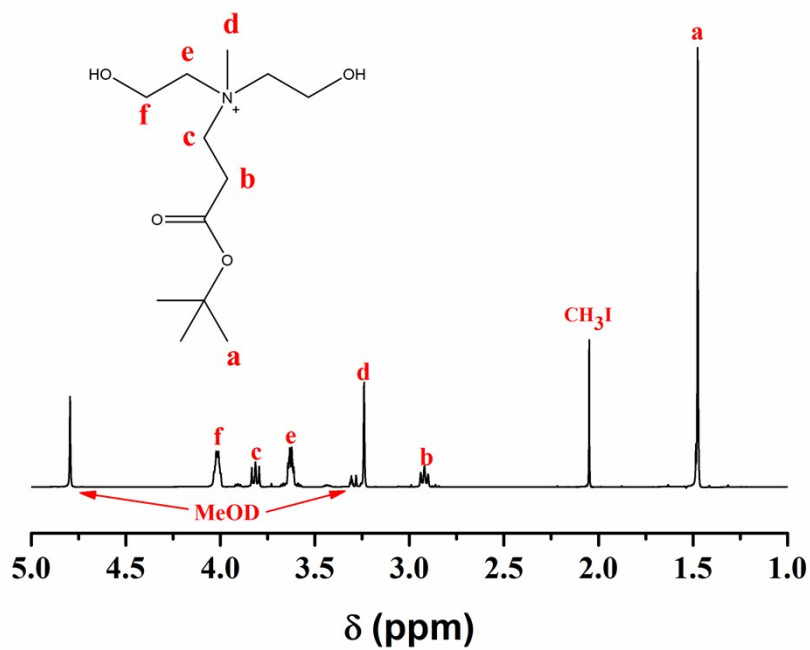


Figure S1 ^1H NMR of tBu-DHCB in methanol-D₄

The ^1H NMR of HO-TPE-OH

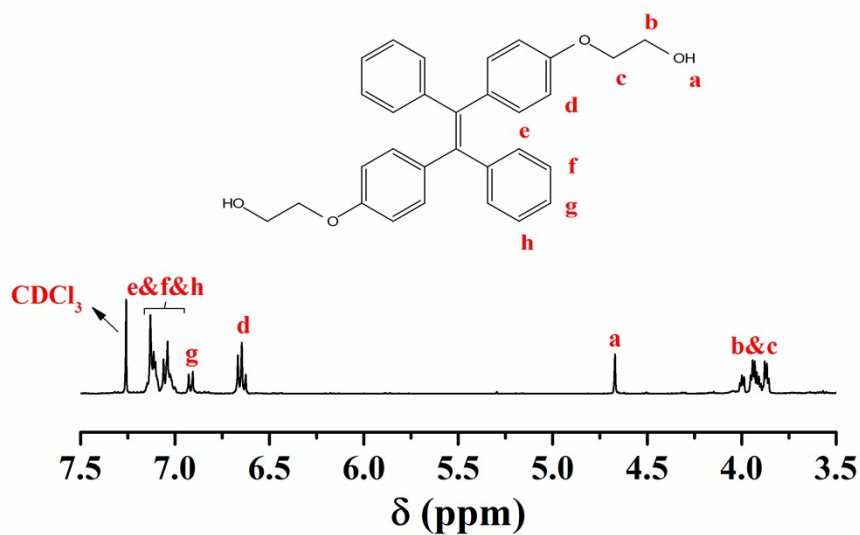


Figure S2 ^1H NMR of HO-TPE-OH in CDCl₃.

The mass spectrometry of HO-TPE-OH

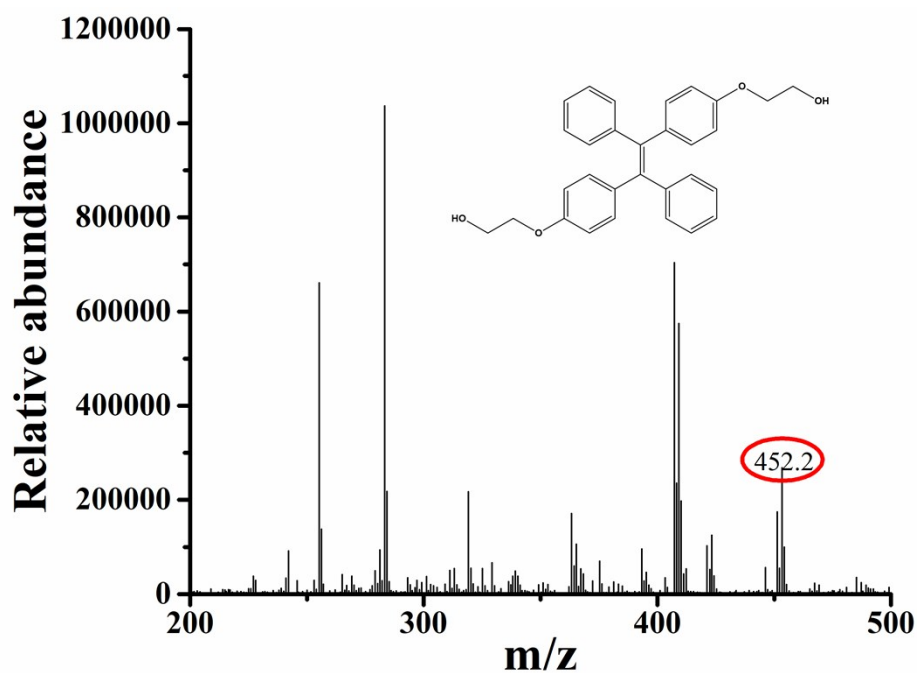


Figure S3 the mass spectrometry of HO-TPE-OH.

The FT-IR spectra of TPE, CBPUs and TPE-CB PUs

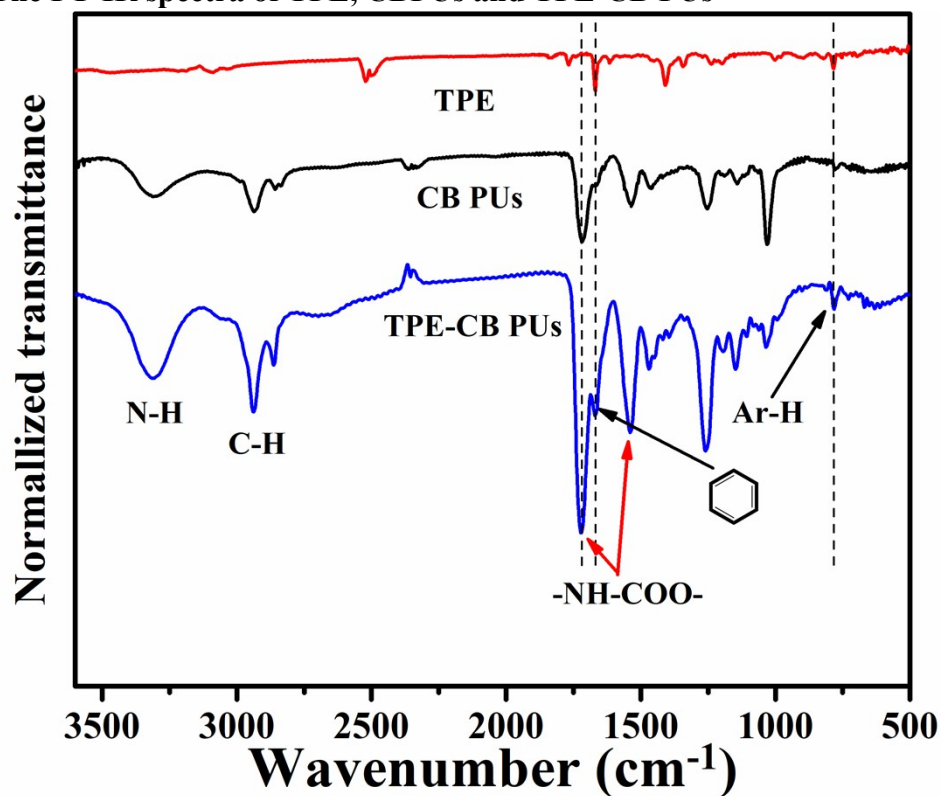


Figure S4 FT-IR spectra of TPE, CBPUs and TPE-CB PUs.

The AIE characteristic of TPE-CB PUs

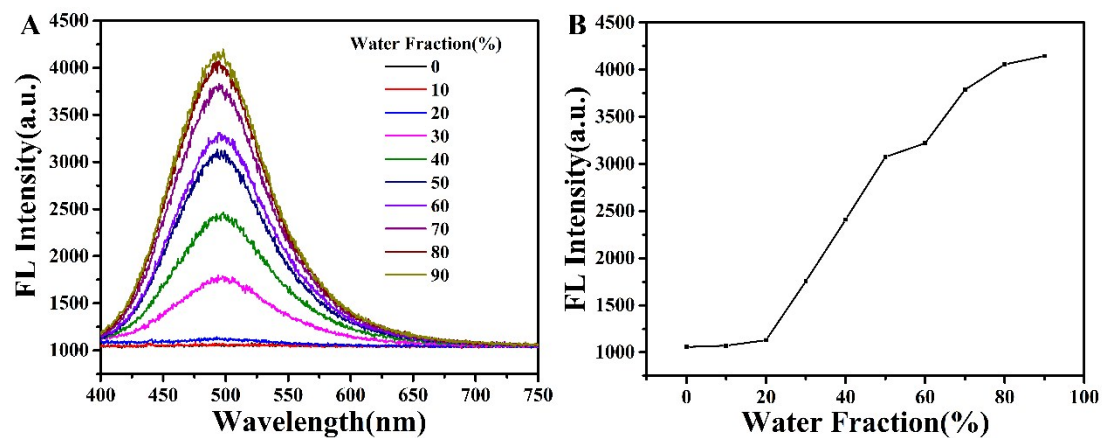


Figure S5 (A) PL spectra of TPE-CB PUs in DMSO-water mixtures with different water fraction ($\lambda_{\text{Ex}}=350$ nm); (B) the changes in PL peak of the compound in different water fraction mixtures.