Supporting Information

for

Synthesis and surface grafting of a β-cyclodextrin dimer facilitating cooperative inclusion of 2,6-ANS

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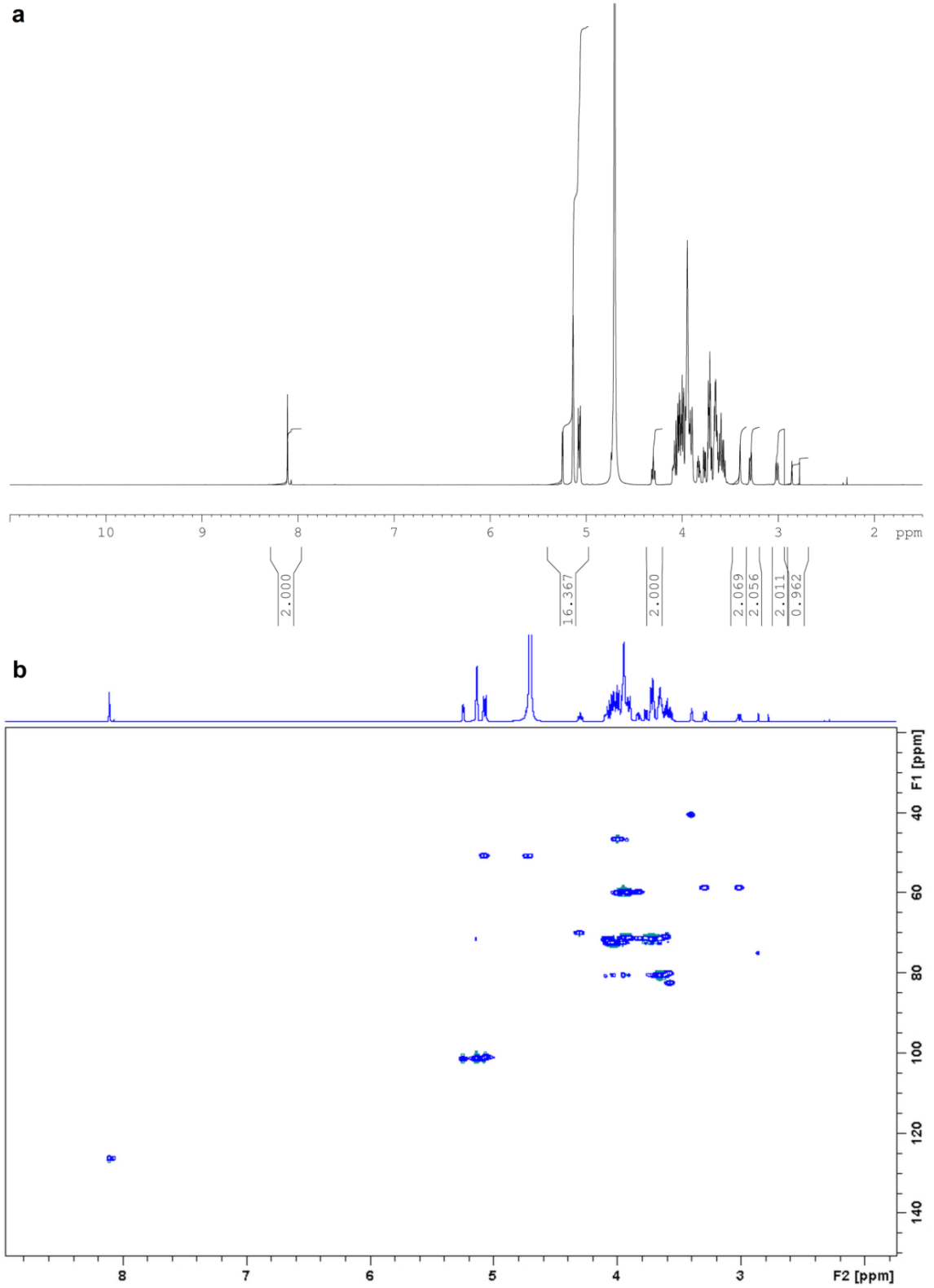
^{1}H NMR and ^{13}C HSQC spectra of β-CD dimer,

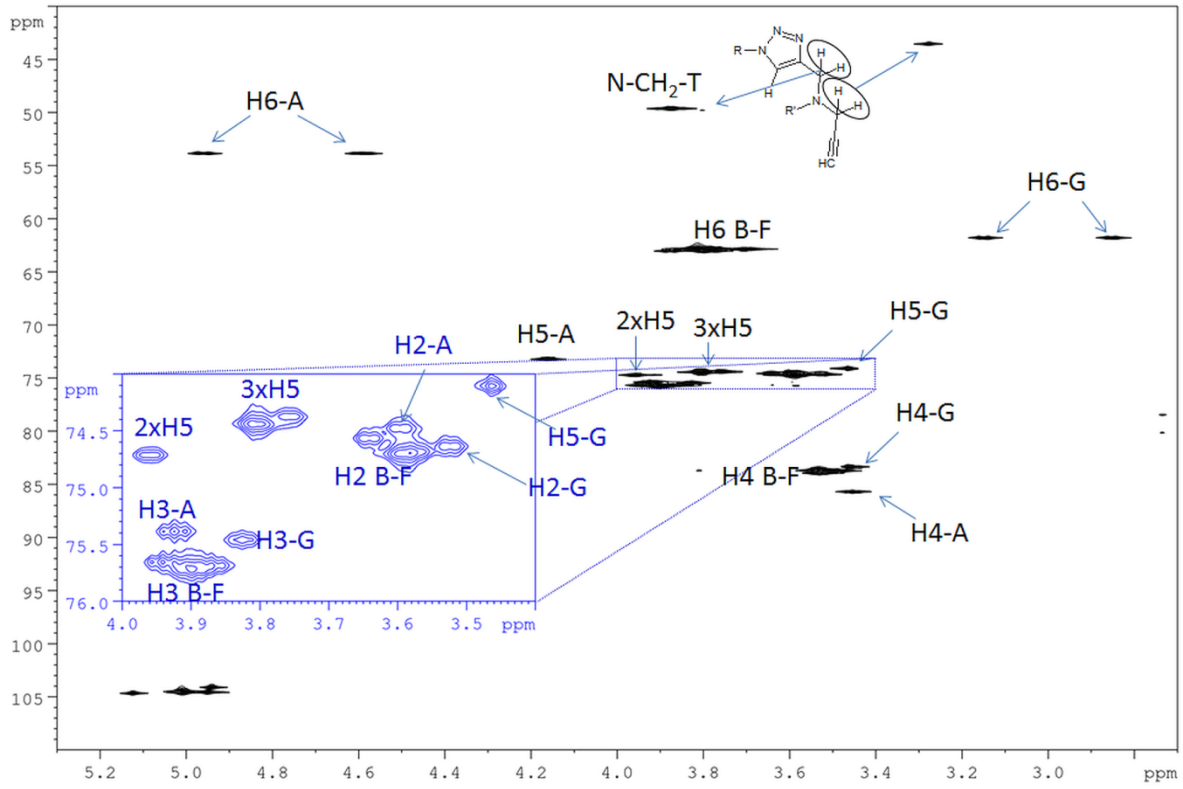
^{13}C HSQC spectra of β-CD dimer in complex with 2,6-ANS and

TIRF 2,6-ANS titration on bare quartz

NMR spectra

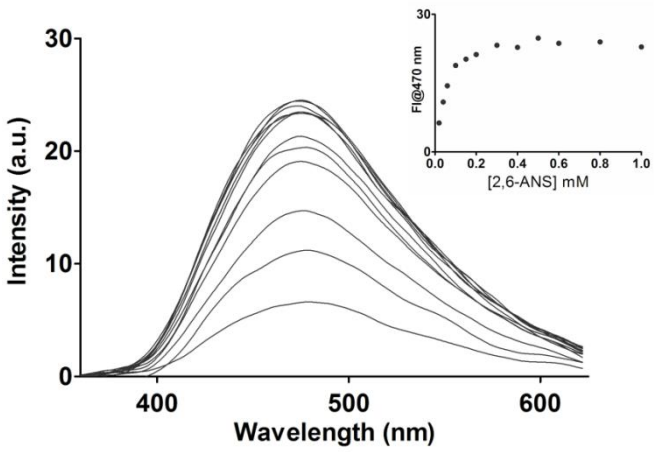


^{1}H NMR (a) and 13C HSQC (b) spectra of the β-CD dimer. Successful CuAAC is evident from the signal resonating at 8.1 ppm (triazole). Furthermore, a signal from the terminal alkyne is present at 2.9 ppm.



Region of a high-resolution ^{13}C HSQC spectrum of the β-CD dimer in complex with 2,6-ANS with the resonance assignment. The region containing H2, 3 and 5 is enlarged (in blue). Letters refer to the glucose monomer in the β-CD: “A” refers to the glucose unit carrying the triazole linker, while “G” refers to the glucose unit, whose C4 is glycosidically linked to the C1 of “A”.

Self-association/quenching of 2,6-ANS



Titration series of 2,6-ANS (0.02–1 mM) recorded by TIRF spectroscopy on a clean and unmodified quartz slide.