Supplementary Material (ESI) for New Journal of Chemistry

Molecular Recognition of Nucleotides by a new Bis-guanidinium-tetrakis-β-Cyclodextrin Tetrapode.

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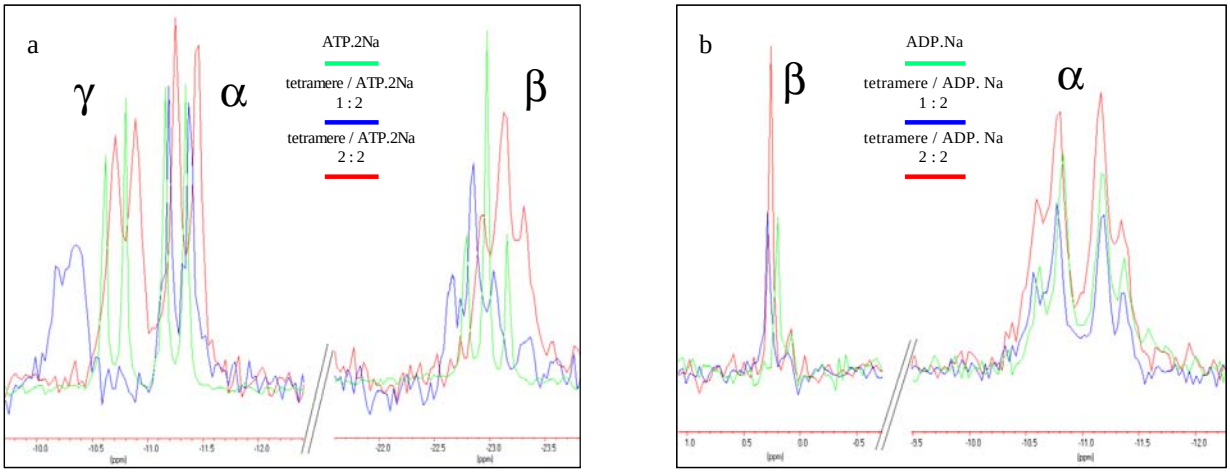
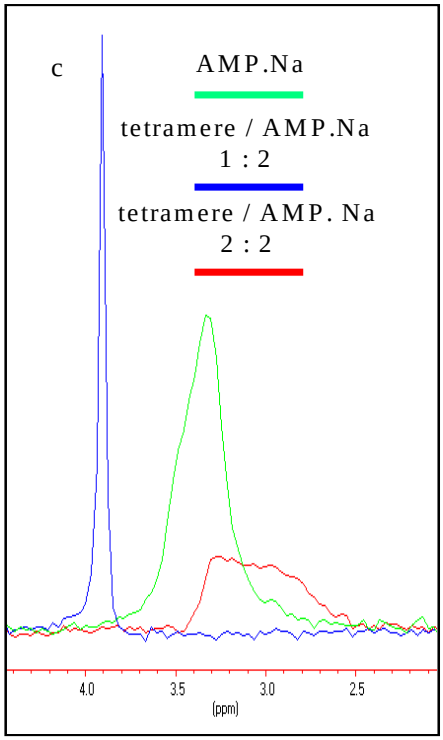
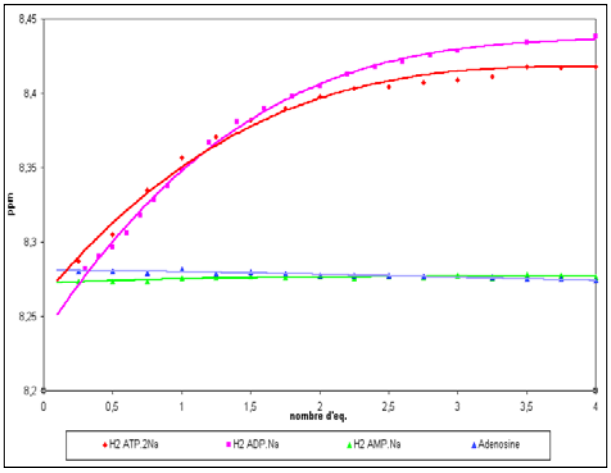
Supplementary Material

1] ^{31}P NMR spectra and ^{1}H NMR

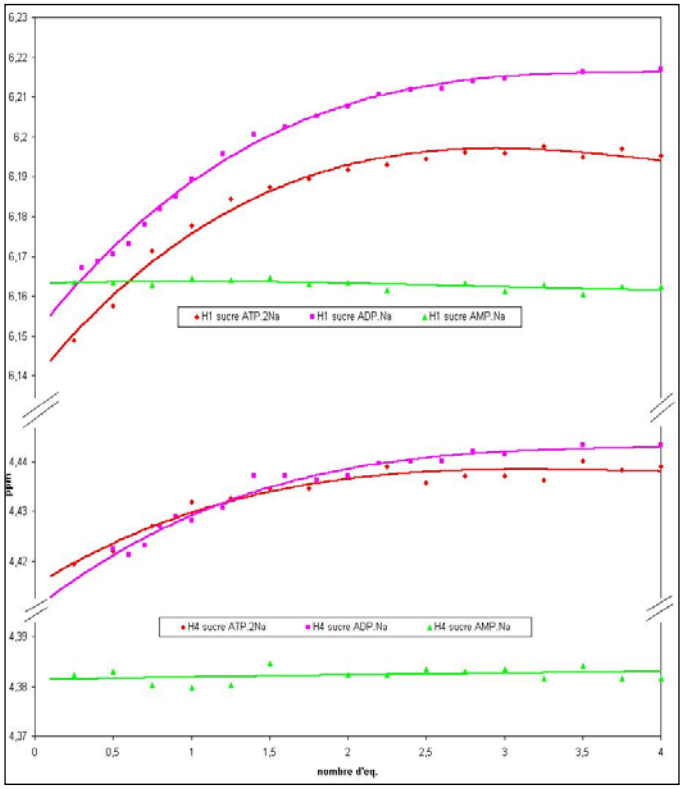




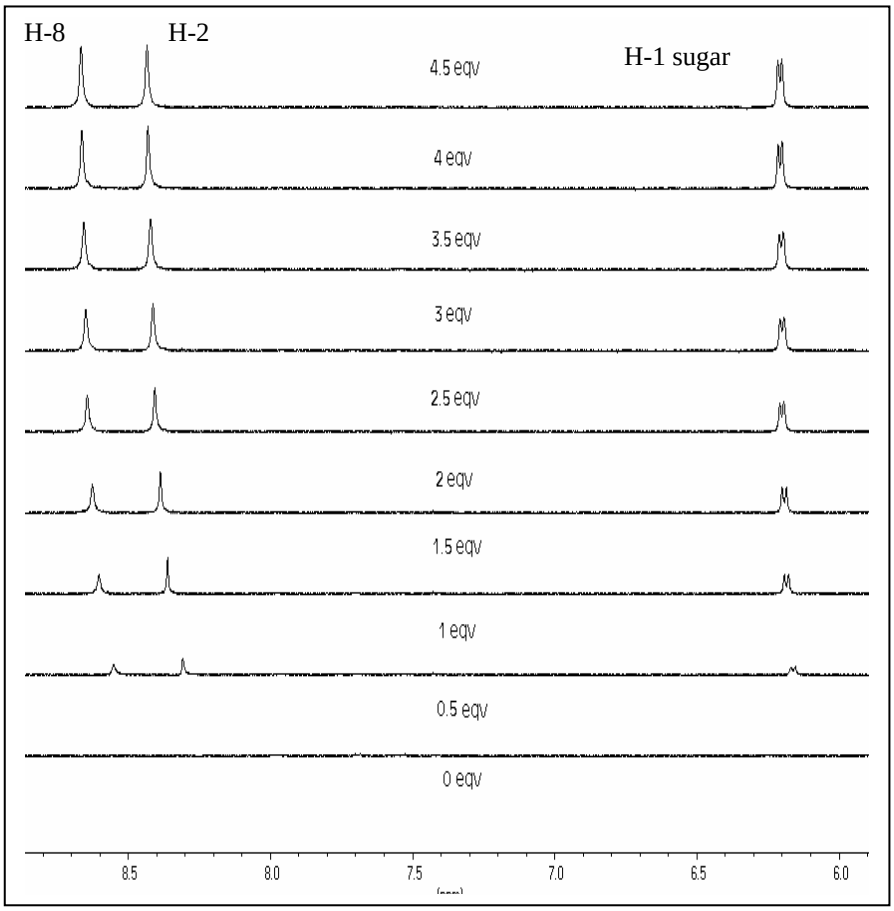
^{31}P NMR CIS of a) ATP.2Na; b) ADP.Na and c) AMP.Na in D_2O after complexation with tetrapode **5**.



^{1}H NMR CIS of the nucleobase H-2 protons in D_2O after complexation with **5**.

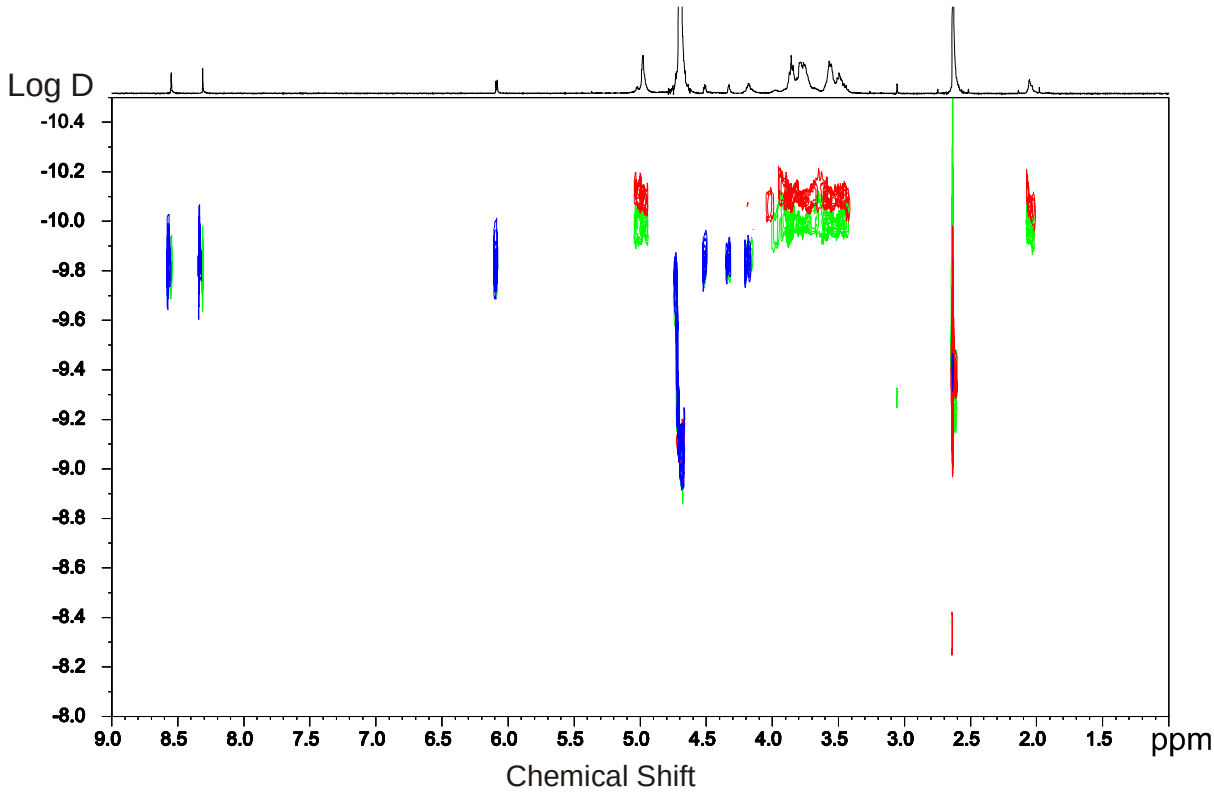


^{1}H NMR CIS of the sugar H-1 and H-4 protons in D_2O after complexation with **5**.

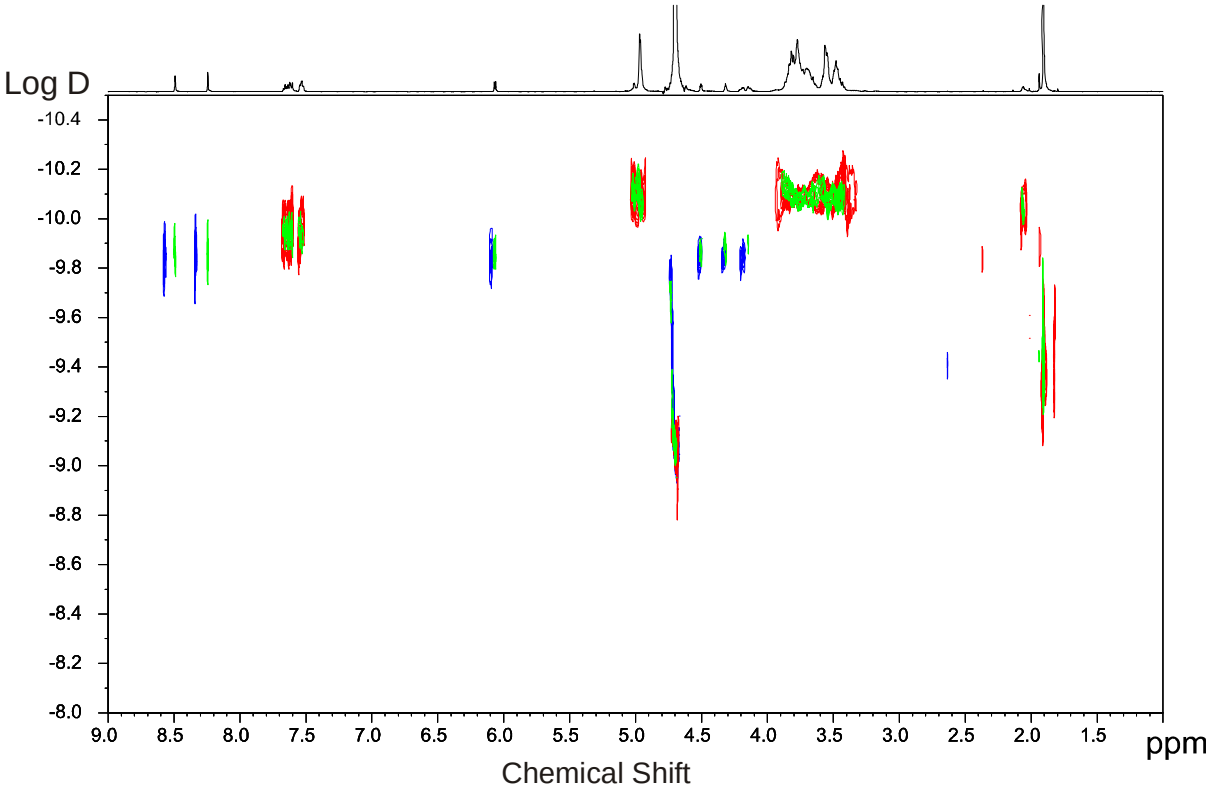


^{1}H NMR titration of ATP. 2Na by the tetrapode **5** in D_2O at 20°C : Part of the spectrum between 9.0 to 6.0 ppm.

Diffusion NMR experiments



Dosy map of [ATP : Tetrapode **5**] for a diffusion time Δ=200ms. The projection shows the ^{1}H spectrum along with the corresponding assignment. It can be noticed that the observed diffusion coefficient of tetrapode **5** increase when it complex the ATP.
blue : ATP , D = 3.21 x 10^{-10} m^2s^{-1}; red : tetrapode **5** free, D = 1.75 x 10^{-10} m^2s^{-1} ; green : [ATP : Tetrapode **5**] complex, D = 2.23 x 10^{-10} m^2s^{-1}.



Dosy map of [ATP : Dipode **4**] for a diffusion time Δ=200ms. The projection shows the ^{1}H spectrum along with the corresponding assignment.
blue : ATP , D = 3.21 x 10^{-10} m^2s^{-1}; red : dipode **4**, D = 2.40 x 10^{-10} m^2s^{-1} ; green : [ATP : Dipode **4**] , D = 2.42 x 10^{-10} m^2s^{-1}.

	IC_{50} (M)
24 h	6.9×10^{-4}
48 h	6.7×10^{-4}
168 h	3.9×10^{-4}

Table 2 : IC_{50} values obtained for tetrapode **5** at 24h, 48h and 168h,
on MRC-5 cells. Values were means of three independent experiments.