Electronic Supplementary Information 6

Non-identical Electronic Characters of the Internucleotidic Phosphates in RNA Modulate the Chemical Reactivity of the Phosphodiester Bonds

Jharna Barman¹, Sandipta Acharya¹, Chuanzheng Zhou¹, Subhrangsu Chatterjee¹, Åke Engström², and Jyoti Chattopadhyaya¹*

¹Department of Bioorganic Chemistry, Box 581, Biomedical Center, Uppsala University, S-751 23 Uppsala, Sweden

²Department of Medical Biochemistry and Microbiology, Box 582, Biomedical Center, Uppsala University, S-751 23 Uppsala, Sweden

jyoti@boc.uu.se

Content:

**Figure S15B.** Panels (b1) – (b8) show the RP-Hplc and SMART™ RP-Hplc profiles at ½, 2, 3, 4, 8, 15, 27, 48 h of alkali digestion of native heptamer 5’-r(CAAGCAC)-3’ (6b). p. S2 – S9
Figure S15(b1): Hplc analysis of alkaline Hydrolysis products of $5'$-r(CAAGCAC)-3' (6b) [after digestion for 0.5h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
Figure S15(b2): Hplc analysis of alkaline Hydrolysis products of 5′-r(CAAGCAC)-3′ (6b) [after digestion for 2h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
**Figure S15(b3):** Hplc analysis of alkaline Hydrolysis products of \(5'-r(CAAGCAC)-3'\) (6b) [after digestion for 3h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
Figure S15(b4): Hplc analysis of alkaline Hydrolysis products of 5'-r(CAAGCAC)-3' (6b) [after digestion for 4h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
Figure S15(b5): Hplc analysis of alkaline Hydrolysis products of 5'-r(CAAGCAC)-3' (6b) [after digestion for 8h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
Figure S15(b6): Hplc analysis of alkaline Hydrolysis products of 5′-r(CAAGCAC)-3′ (6b) [after digestion for 15h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
Figure S15(b7): RP-Hplc analysis of alkaline Hydrolysis products of 5'-r(CAAGCAC)-3' (6b) [after digestion for 27h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.
Figure S15(b8): RP-Hplc analysis of alkaline Hydrolysis products of 5‘-r(CAAGCAC)-3’ (6b) [after digestion for 48h at pH 12.5 using 0.03N NaOH/ 20°C, followed by quenching with 0.03 N aq. acetic acid]. For Hplc conditions see the experimental section in the text.