

Supplementary Information

Enhanced stability of G-Tetraplexes from Conformationally Constrained *aep*-PNA backbone

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Contents

1. HPLC of Purified PNA	S2
2. Mass of PNA P1 (ESI)	S2
3. Mass of PNA P1 (MALDI-TOF)	S4
4. Mass of PNA P1 (MALDI-TOF)	S5
5. Mass of PNA P2 (MALDI-TOF)	S6
6. Mass of PNA P2 (ESI)	S7
7. Mass of PNA P3 (ESI)	S8
8. Mass of PNA P4 (MALDI-TOF)	S9
9. Mass of PNA P5 (MALDI-TOF)	S10
10. Mass of PNA P5 (ESI)	S11
11. Mass of PNA P5 (ESI)	S12
12. Mass of PNA P5 (MALDI-TOF) with salt.....	S13
13. Mass of PNA P6 (MALDI-TOF)	S14
14. Mass of PNA P6 (MALDI-TOF)	S15
15. Mass of PNA P7 (MALDI-TOF)	S16
16. Mass of PNA P8 (MALDI-TOF)	S17
17. Mass of PNA P9 (MALDI-TOF)	S18
18. UV-Melting Profile of <i>aeg</i> , and <i>aep</i> -PNA	S19
19. ITC of Buffer and PNA P3.....	S20
20. ITC of <i>aeg</i> and <i>aep</i> -PNA P1	S21
21. ITC of <i>aeg</i> and <i>aep</i> -PNA P5	S22

1. HPLC of Purified PNA

P1 H₂N-T-G-G-G-T-β-ala

P2 H₂N-T-G-G-G-G-β-ala

P3 H₂N-T-G-G-G-g-T-β-ala

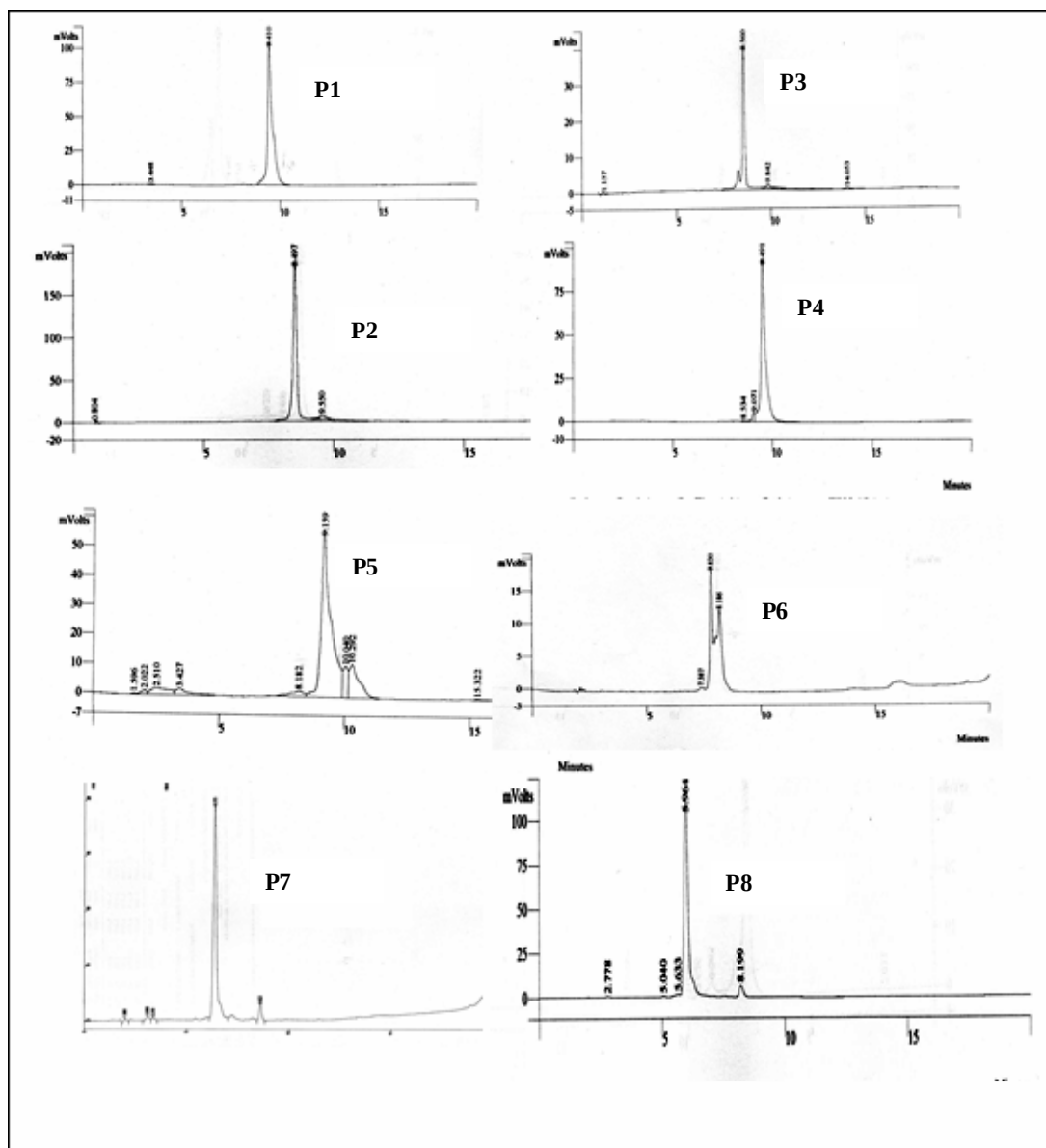
P4 H₂N-T-G-G-G-g-t-β-ala

P5 H₂N-t-g-g-g-g-t-β-ala

P6 AcHN-g-g-g-g-t-β-ala

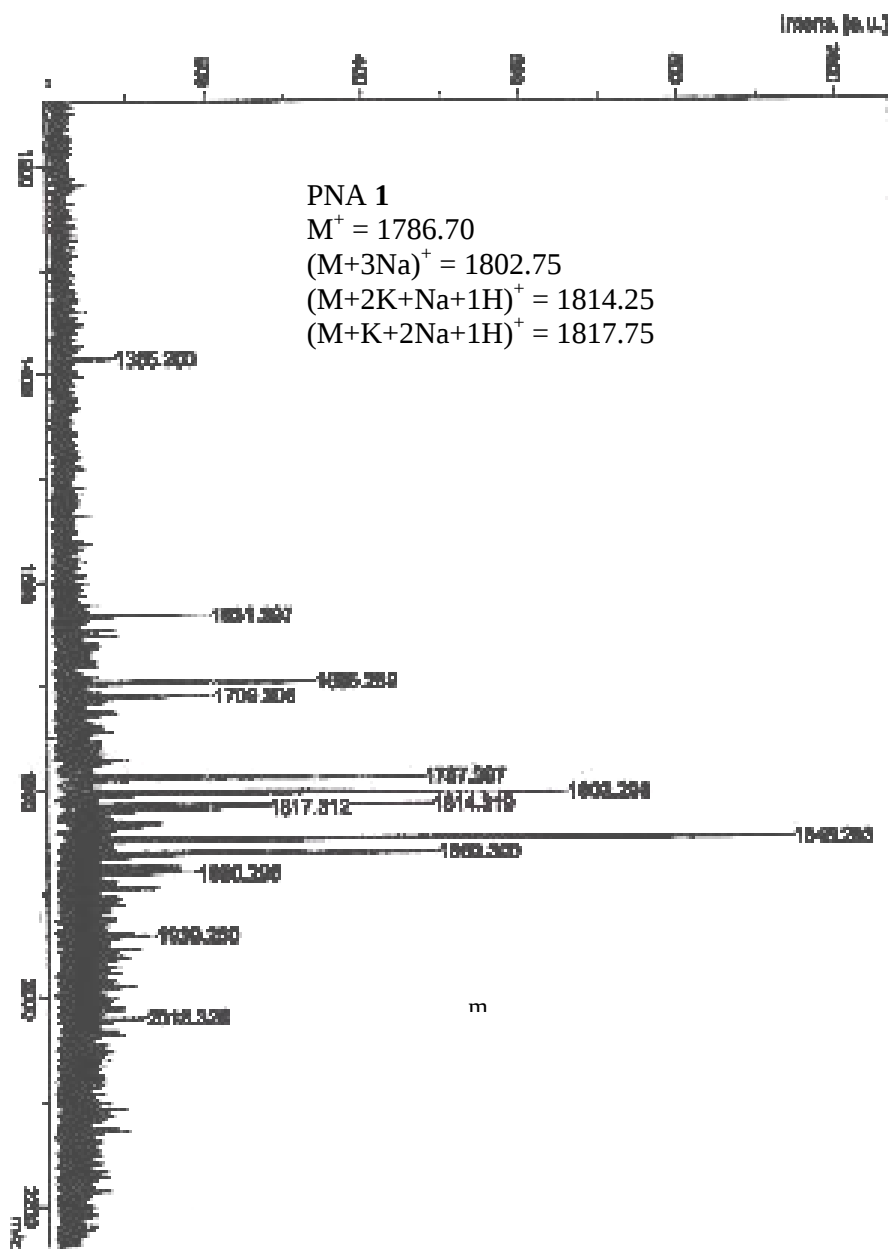
P7 AcHN-g-g-g-t-β-ala

P8 AcHN-g-g-g-t-β-ala



HPLC Condition : The purity of the oligomer after HPLC was ascertained by HPLC on a C18 RP column., using a gradient of 0 to 50% buffer B in 30 min at a flow rate of 1.0 mL/min, where buffer A = water with 0.1% TFA and buffer B = 60% CH₃CN in water containing 0.1% TFA.

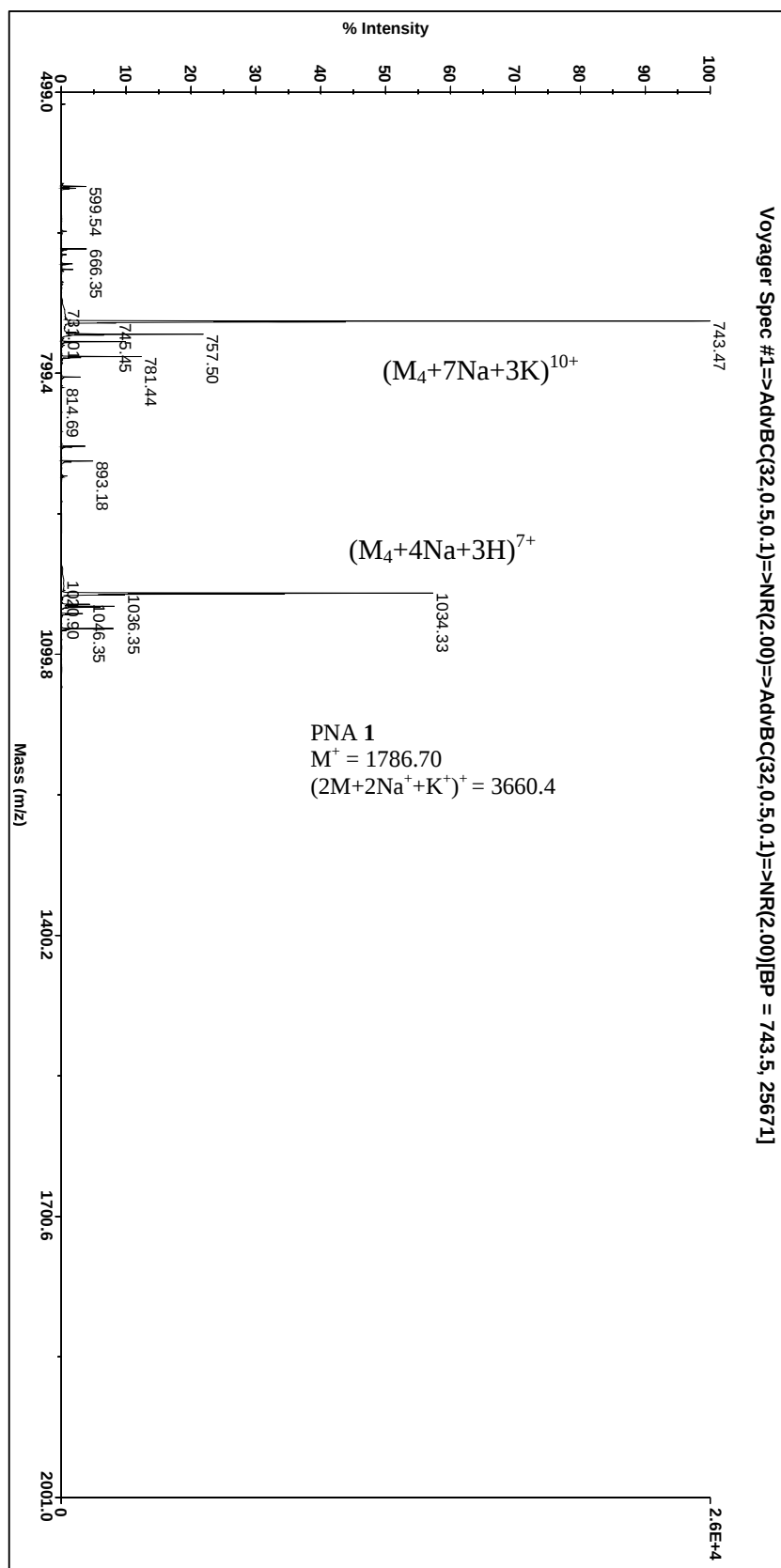
Environ Monit Assess (2015) 189:1111–1124



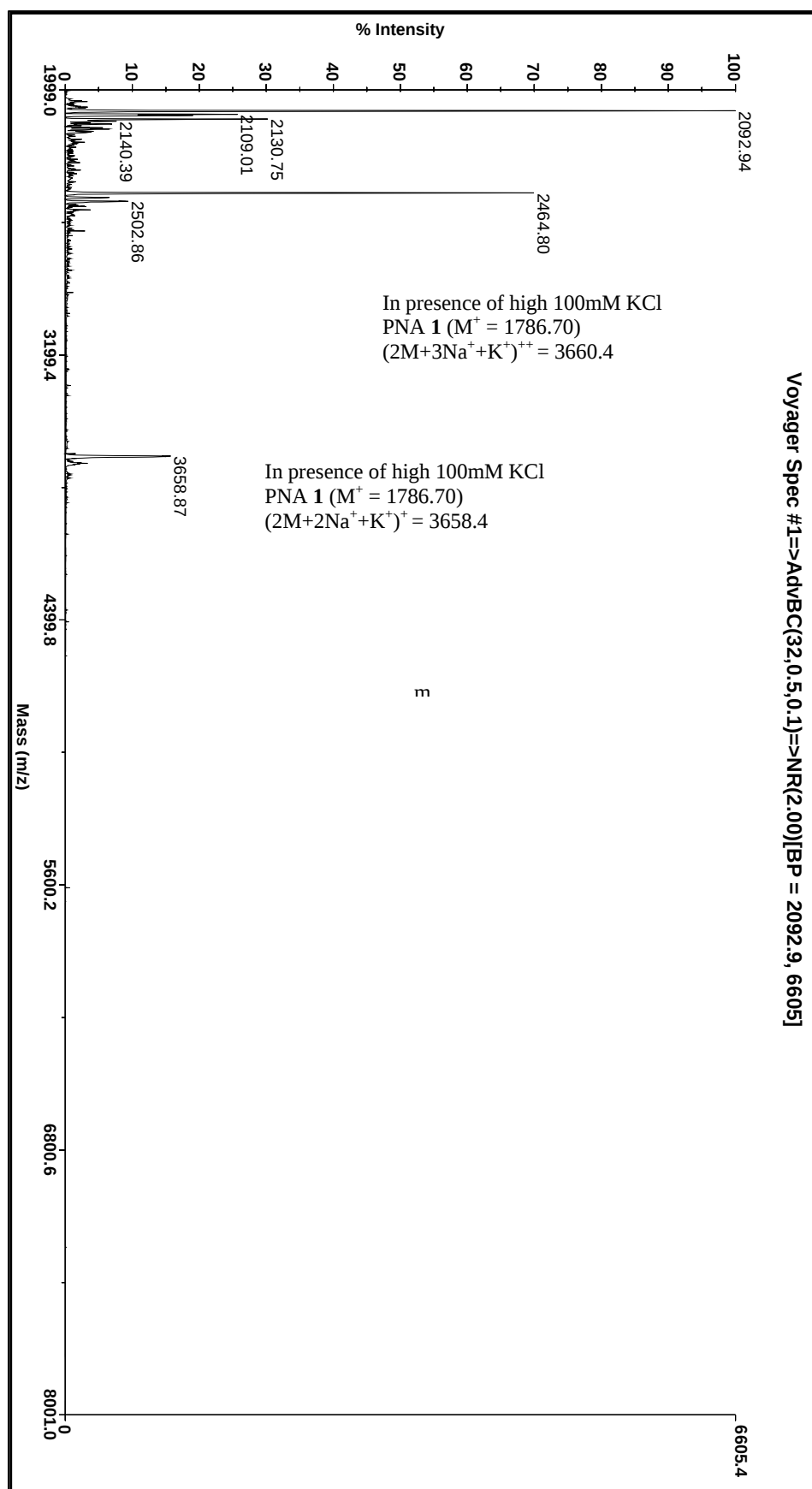
Multiple Spectra Report

Printed on 10/18/2013 10:33:33

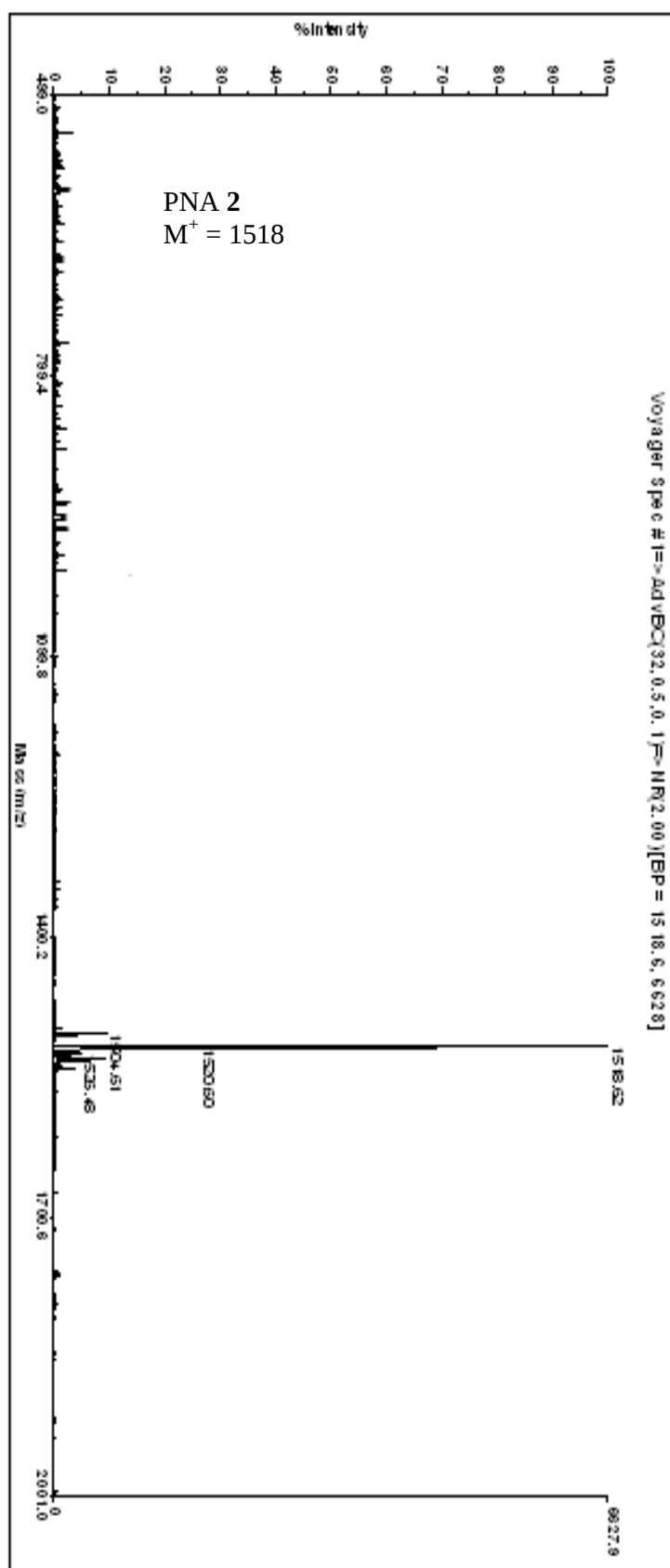
3. Mass of PNA P1 (MALDI-TOF)



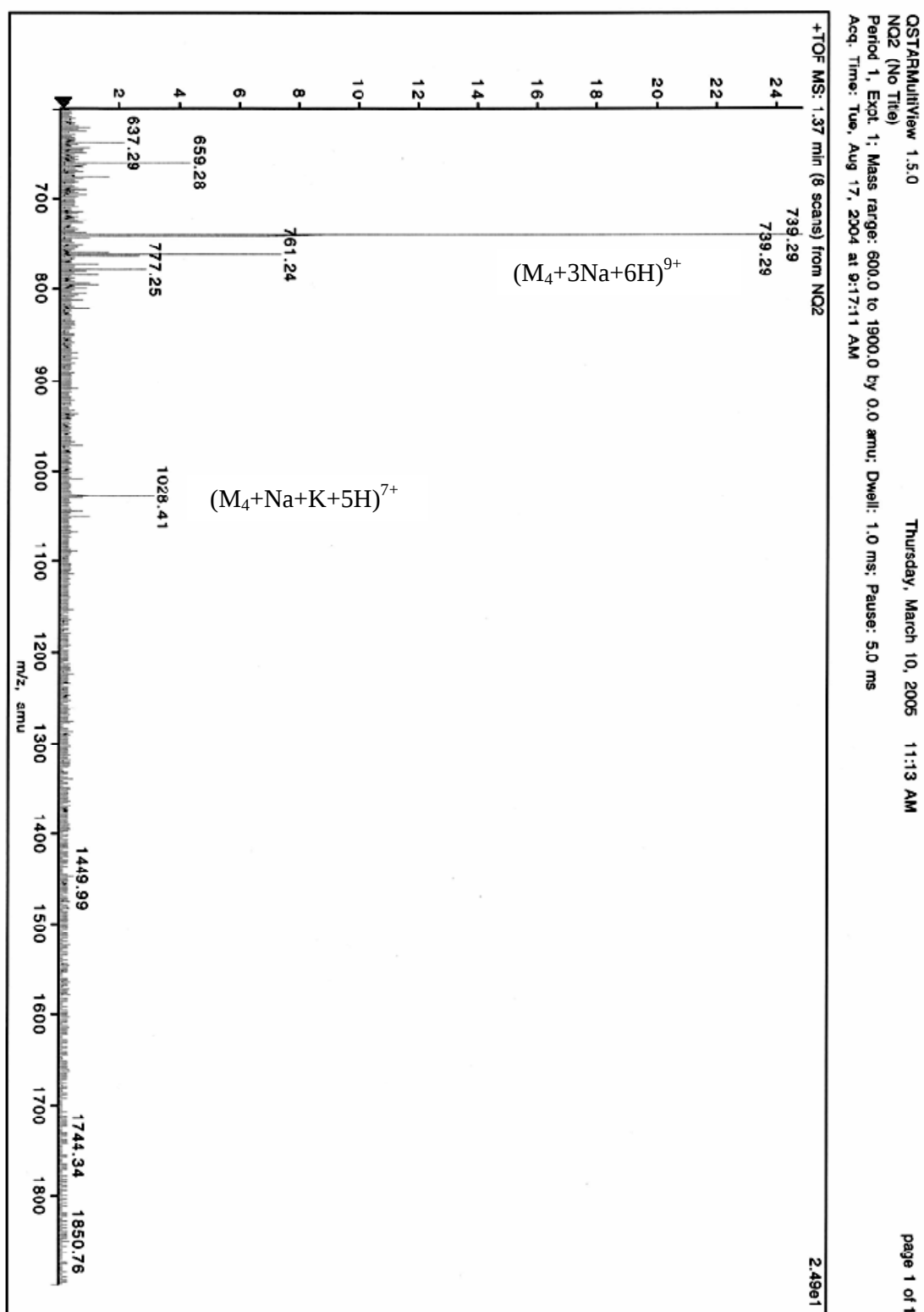
4. Mass of PNA P1 (MALDI-TOF)



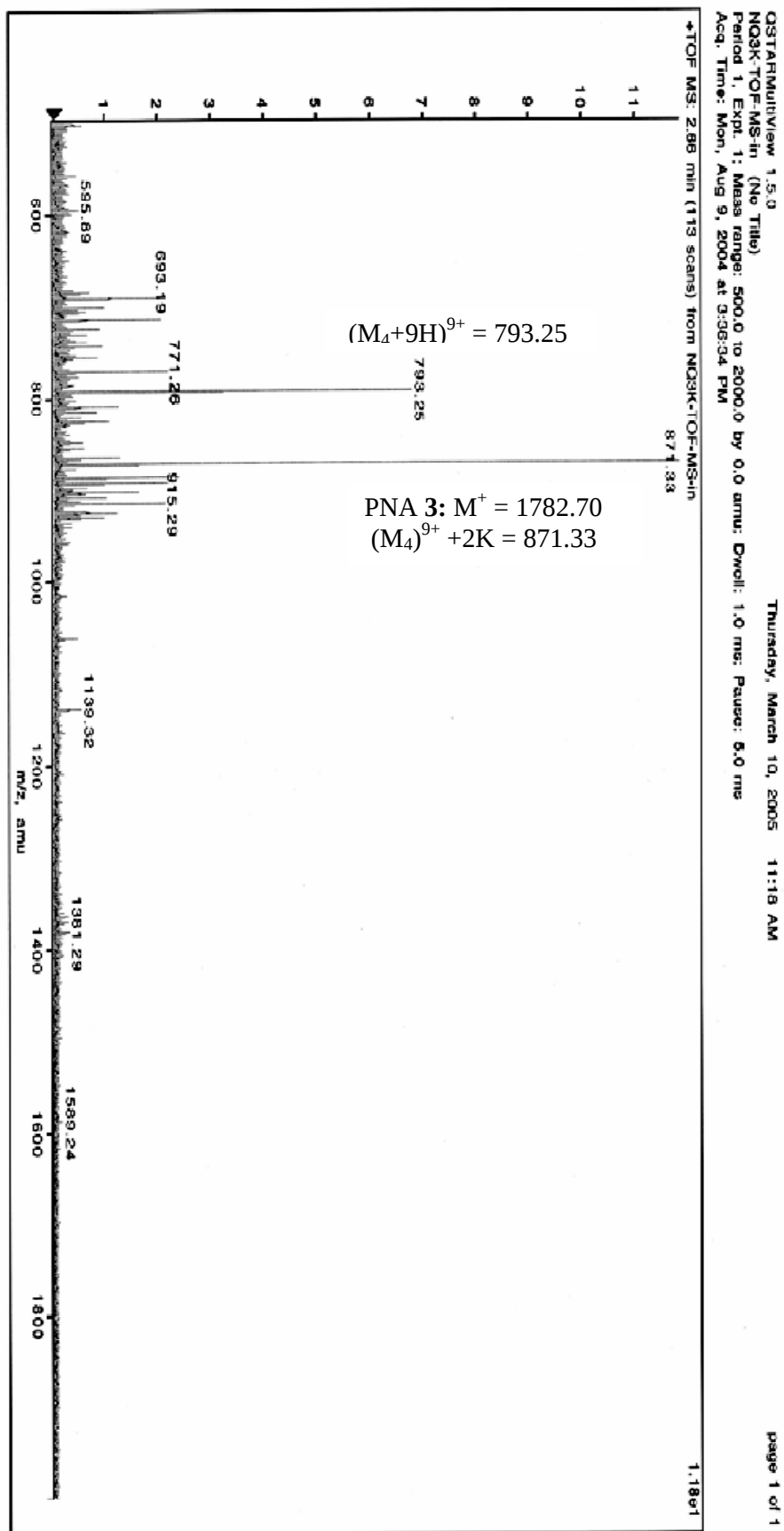
5. Mass of PNA P2 (MALDI-TOF)



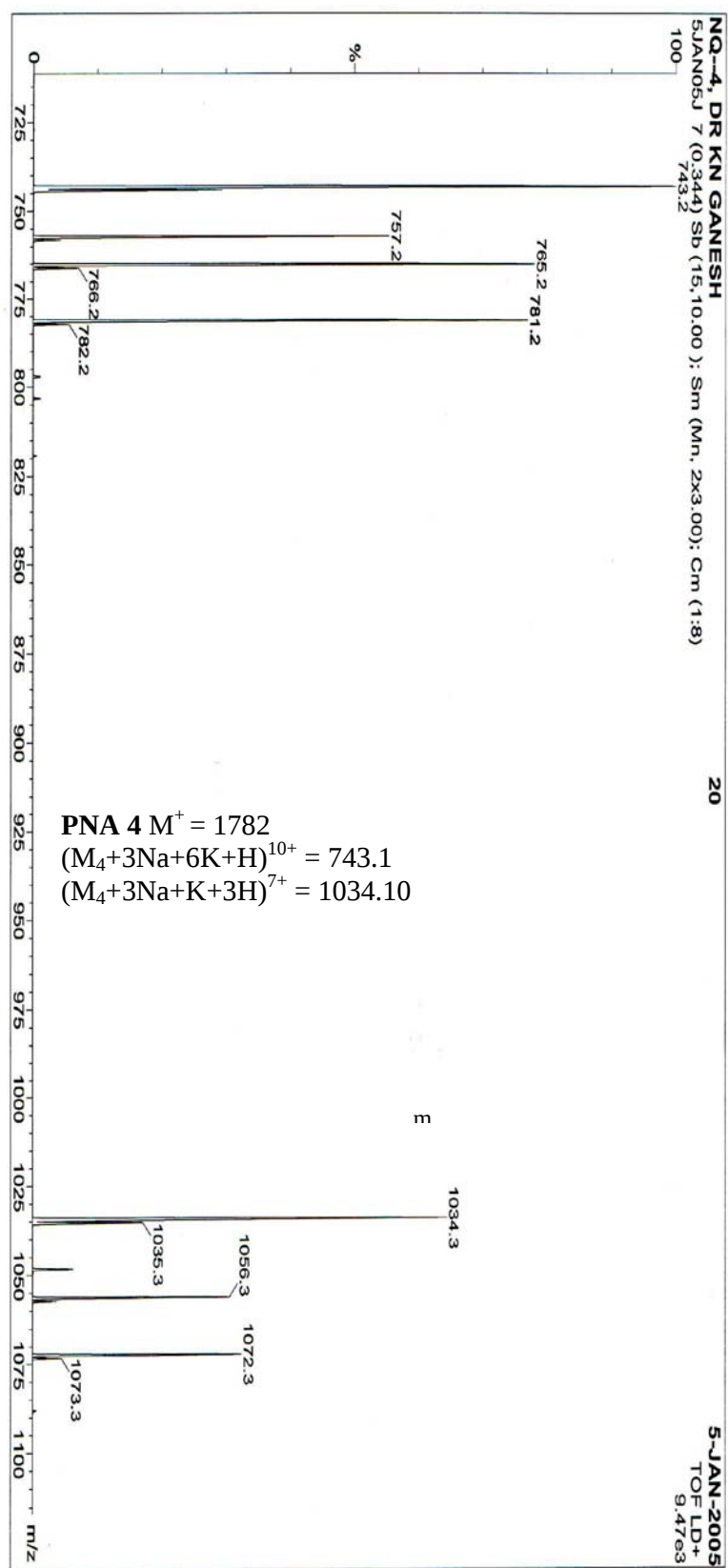
6. Mass of PNA P2 (ESI)



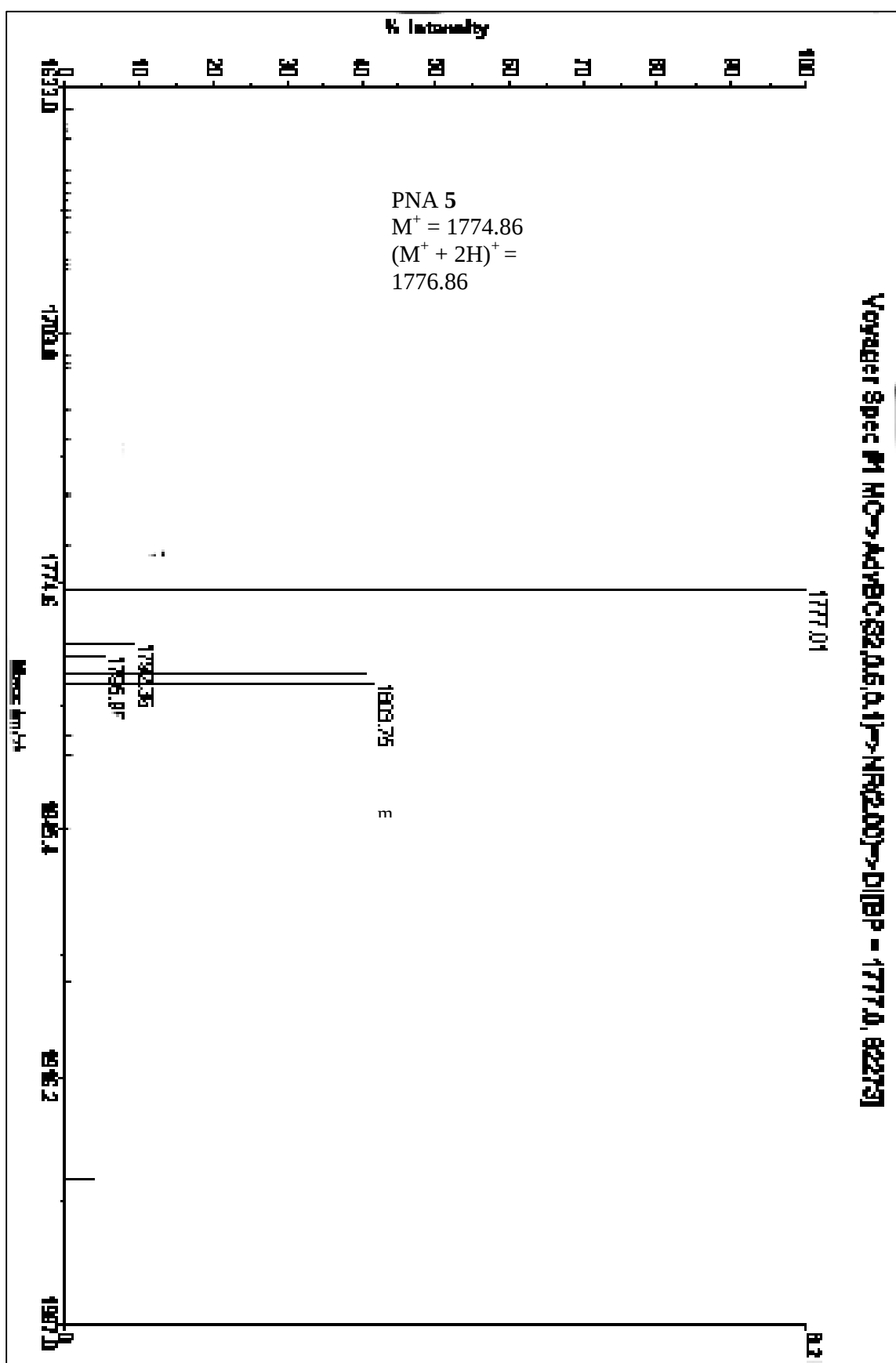
7. Mass of PNA P3 (ESI)



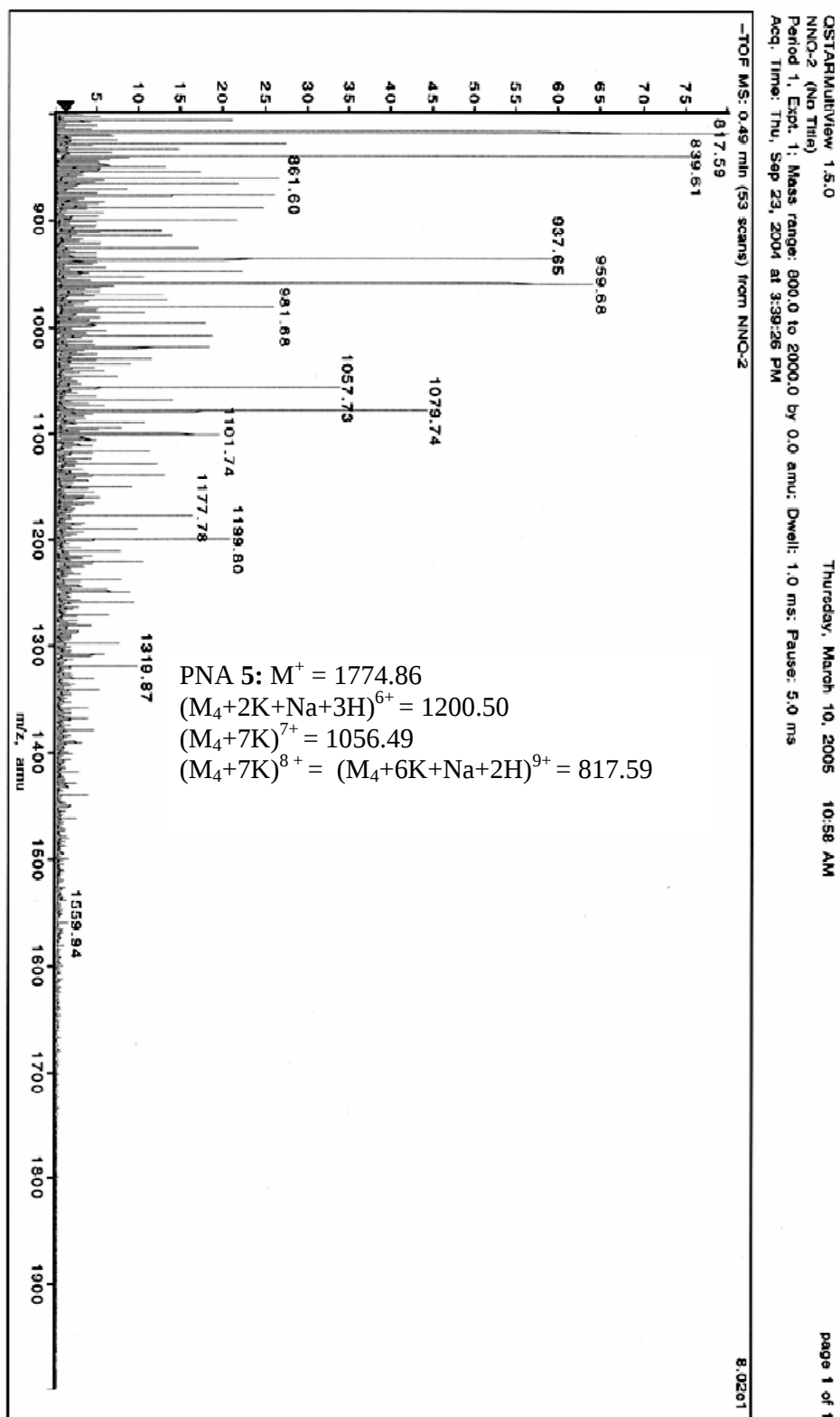
8. Mass of PNA P4 (MALDI-TOF)



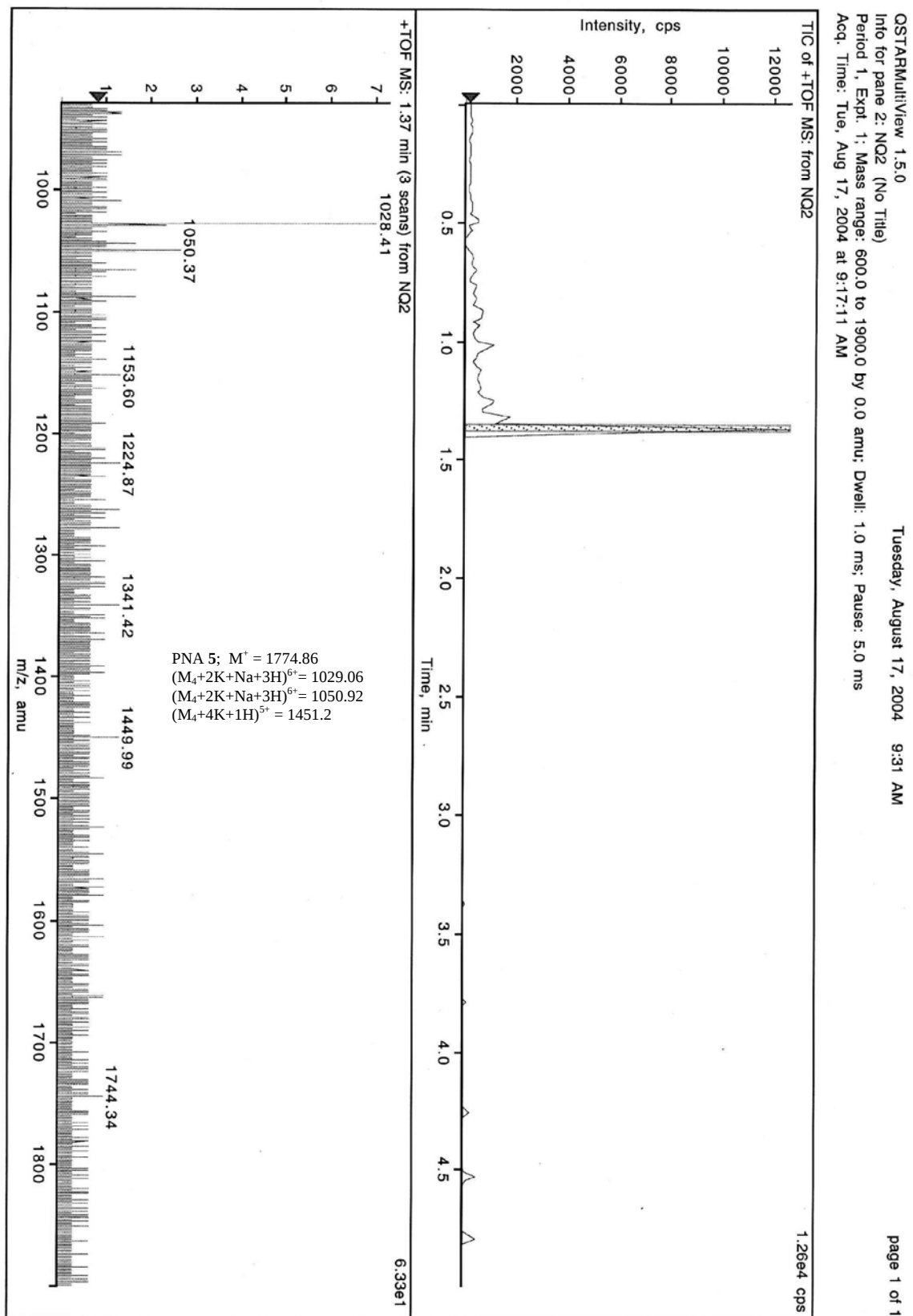
9. Mass of PNA P5 (MALDI-TOF)



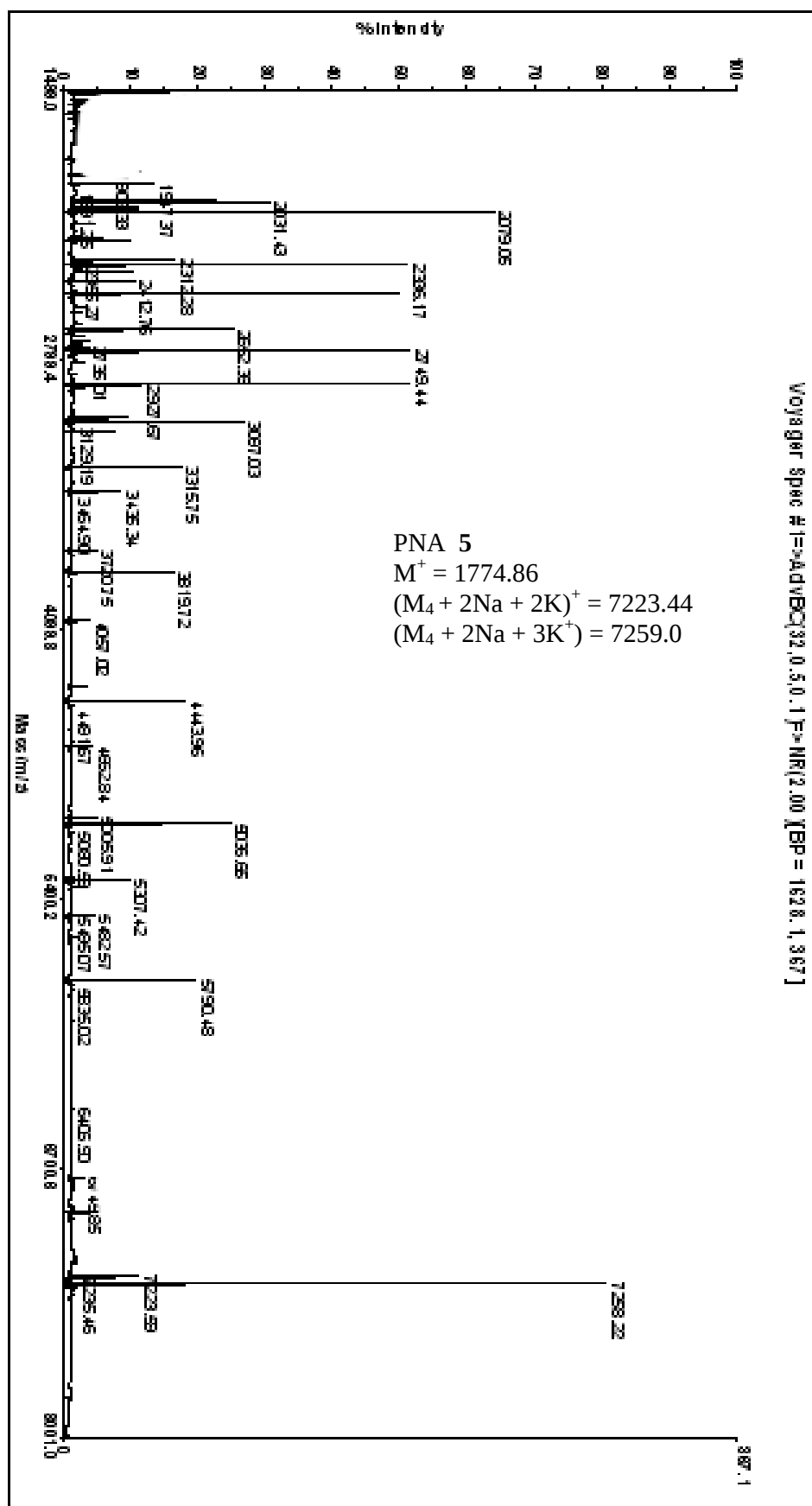
10. Mass of PNA P5 (ESI)



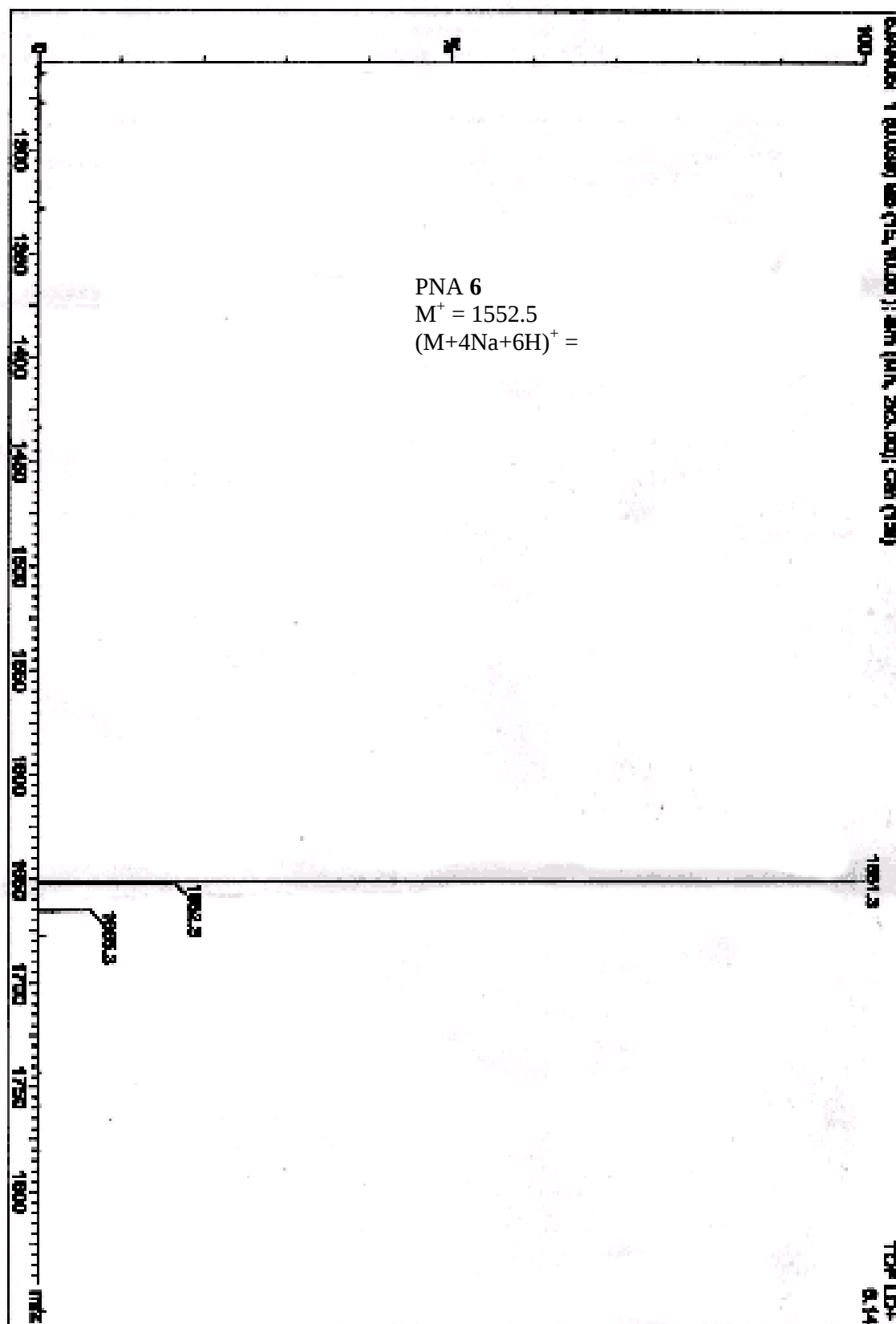
11. Mass of PNA P5 (ESI)



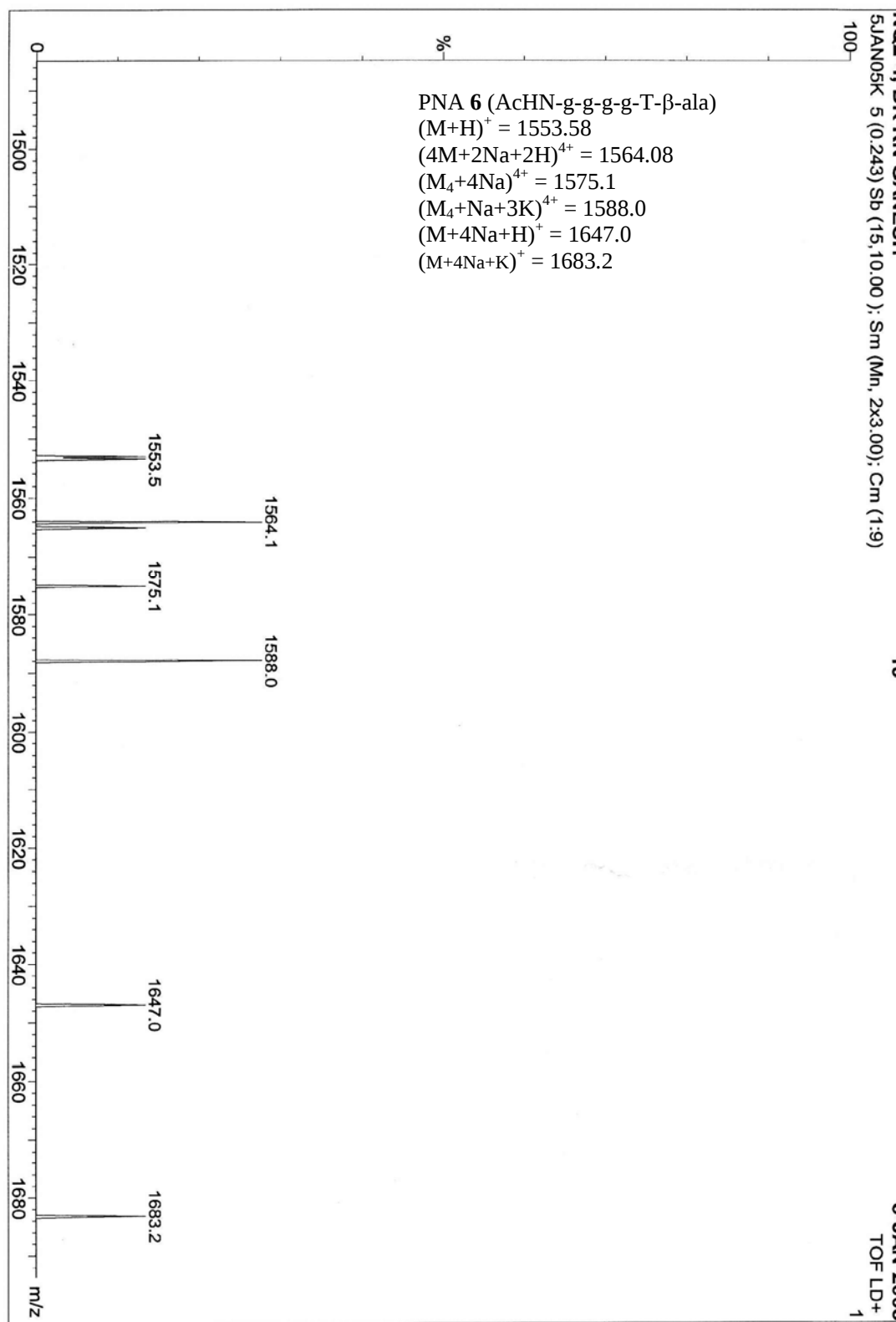
12. Mass of PNA P5 (MALDI-TOF) with salt



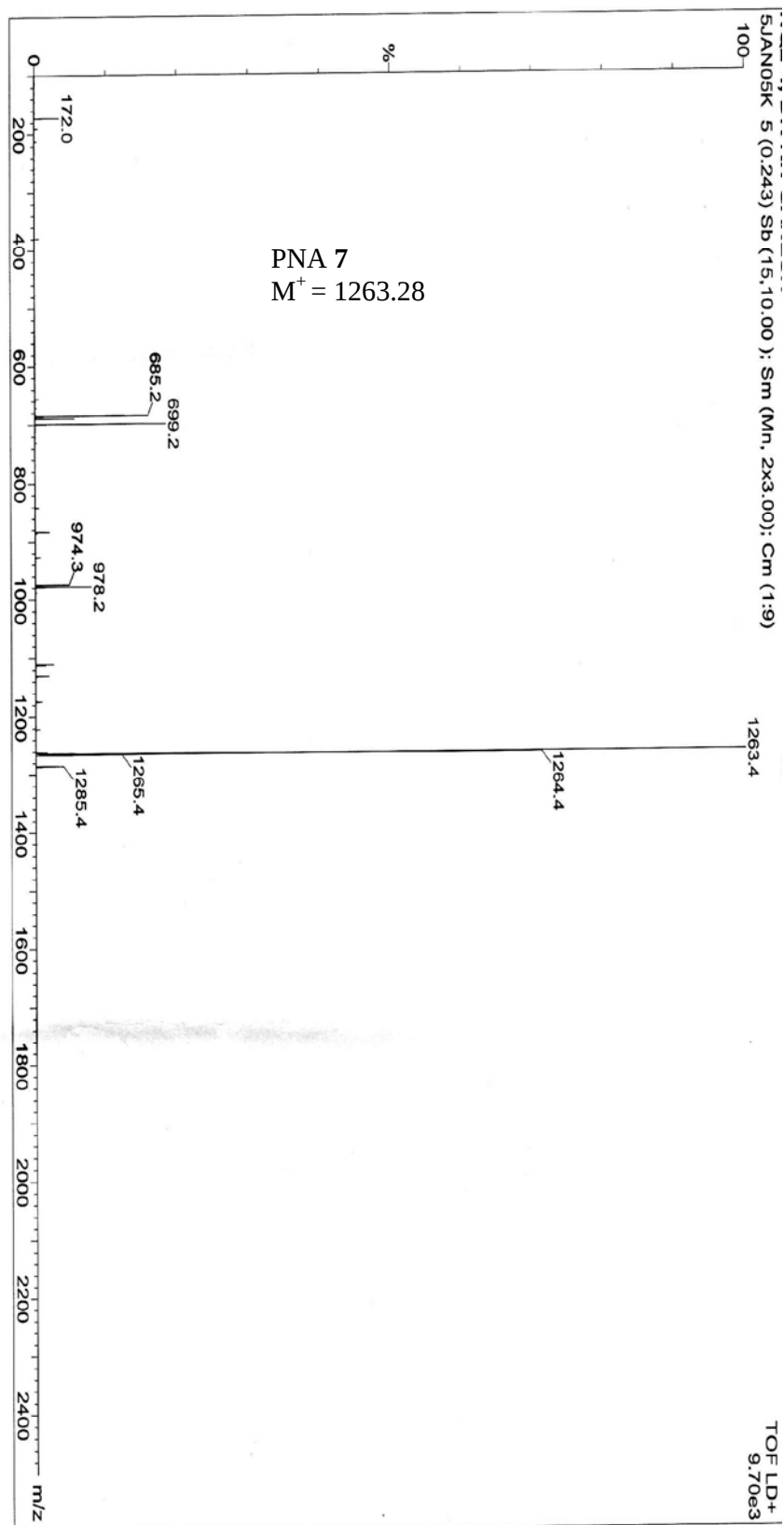
13. Mass of PNA P6 (MALDI-TOF)



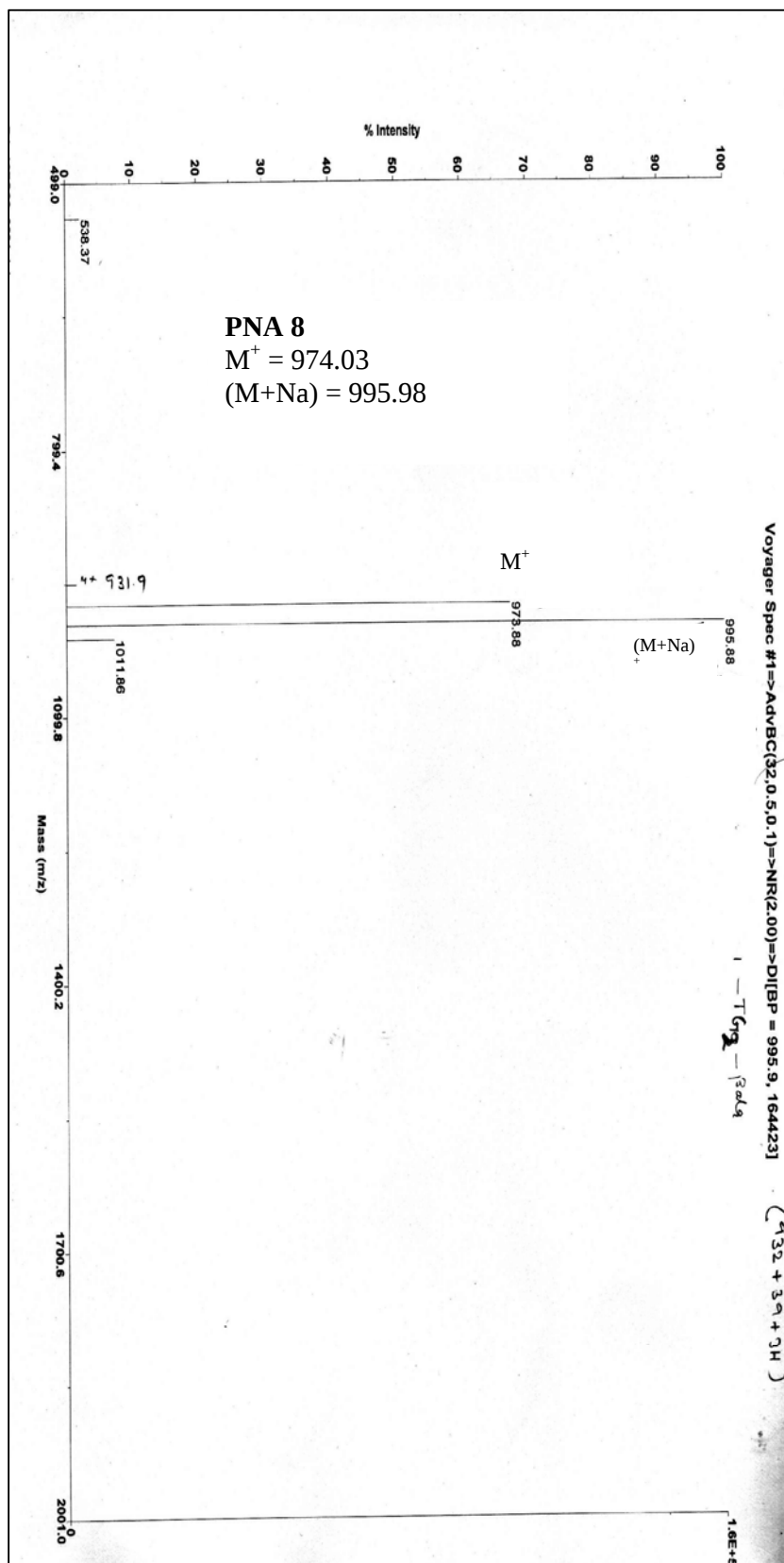
14. Mass of PNA P6 (MALDI-TOF)



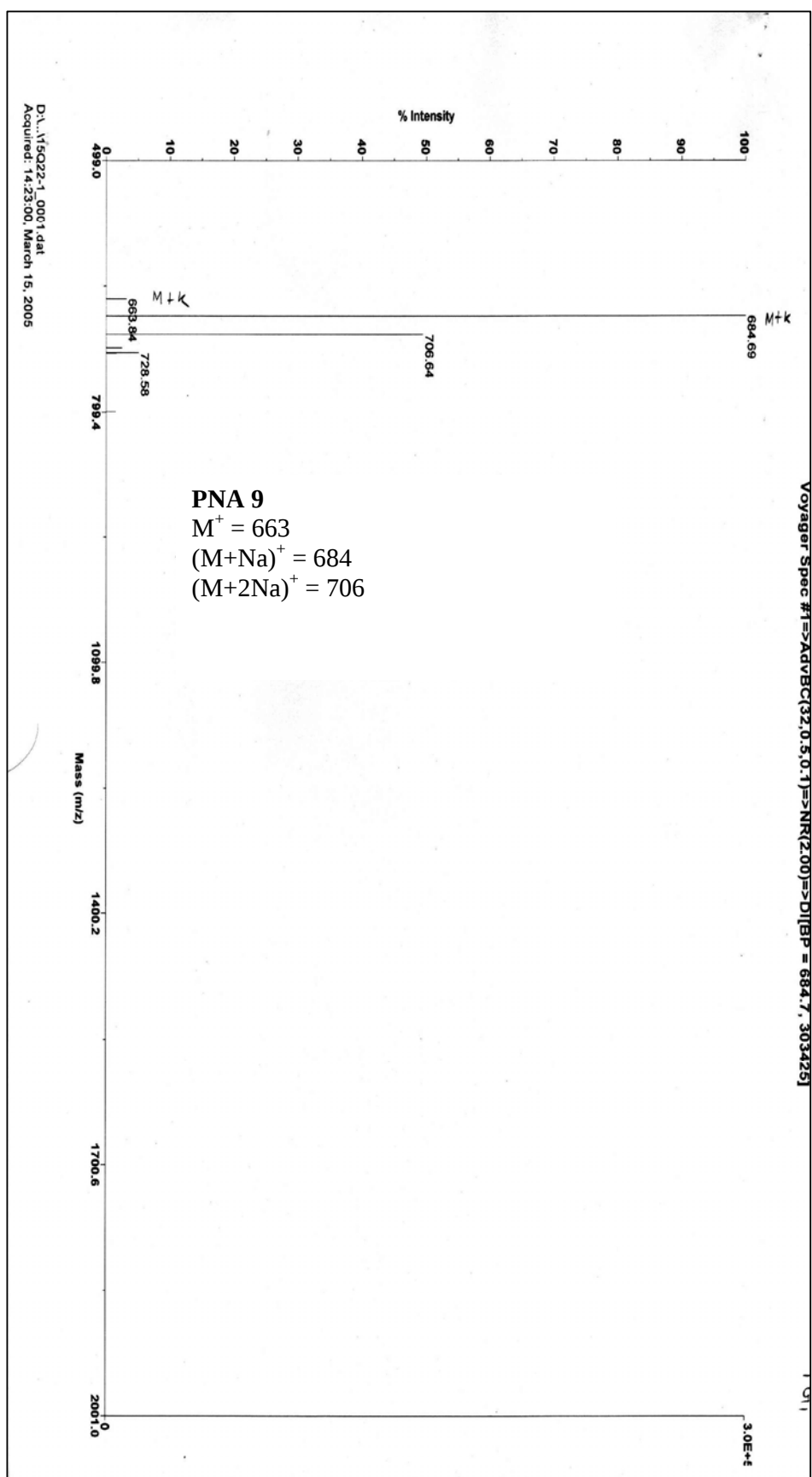
15. Mass of PNA P7 (MALDI-TOF)



16. Mass of PNA P8 (MALDI-TOF)



17. Mass of PNA P9 (MALDI-TOF)



18. UV-Melting Profile of *aeg*, and *aep*-PNA

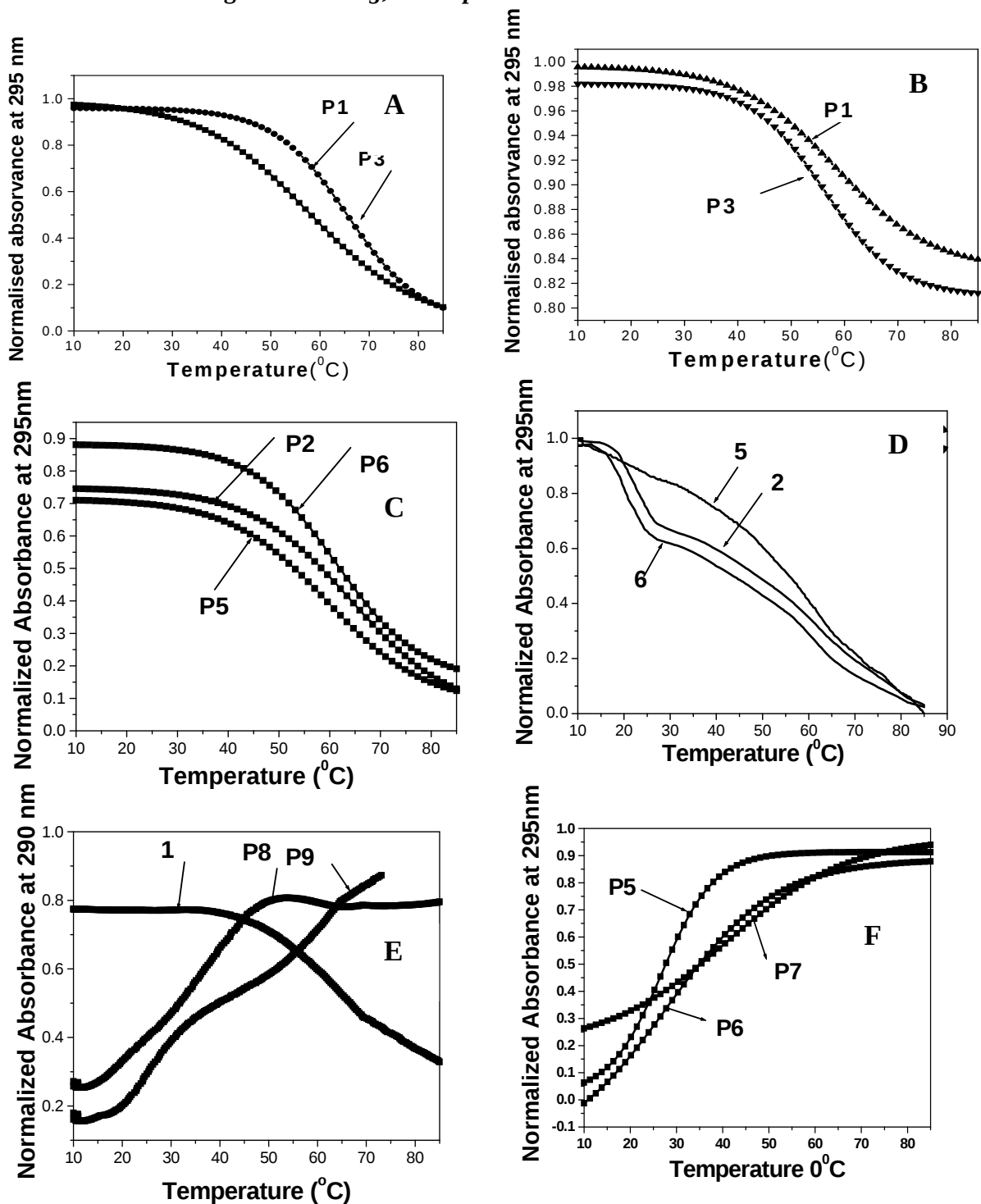


Figure SI. UV-Thermal melting of PNA under different condition: A 100mmol. Potassium-Phosphate , B 100mmol. Potassium- Phosphate with 100mmol KCl , C 10 mM Potassium Phosphate containing 100 mM KCl. 7.8 , D 10 mM Potassium Phosphate containing 100 mM KCl. pH 6.4 , E potassium phosphate (100mM) containing 100 mM of KCl. F, 10 mM Potassium Phosphate containing 100 mM KCl. pH5.8

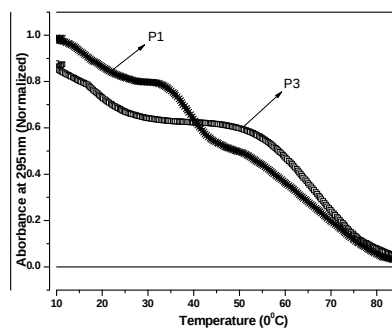
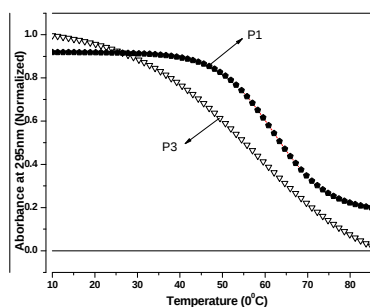
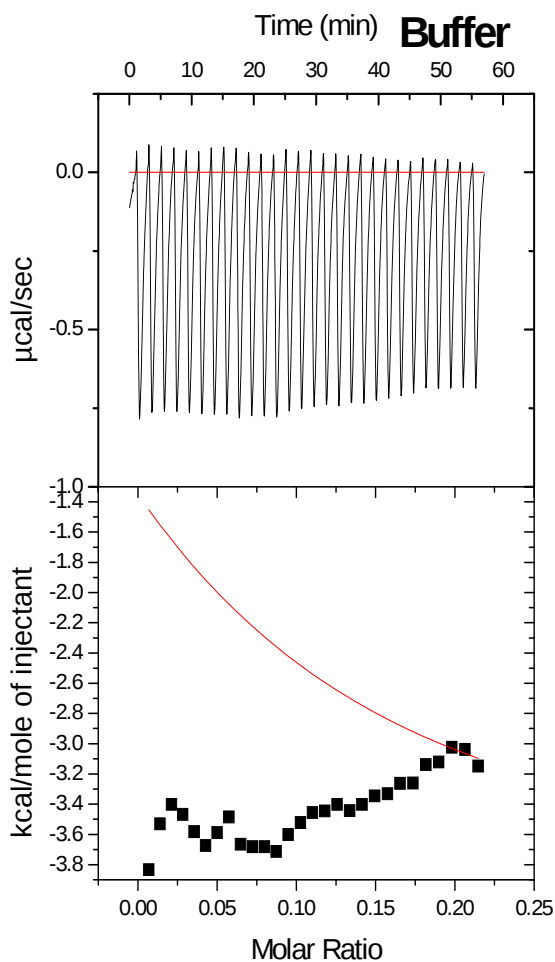


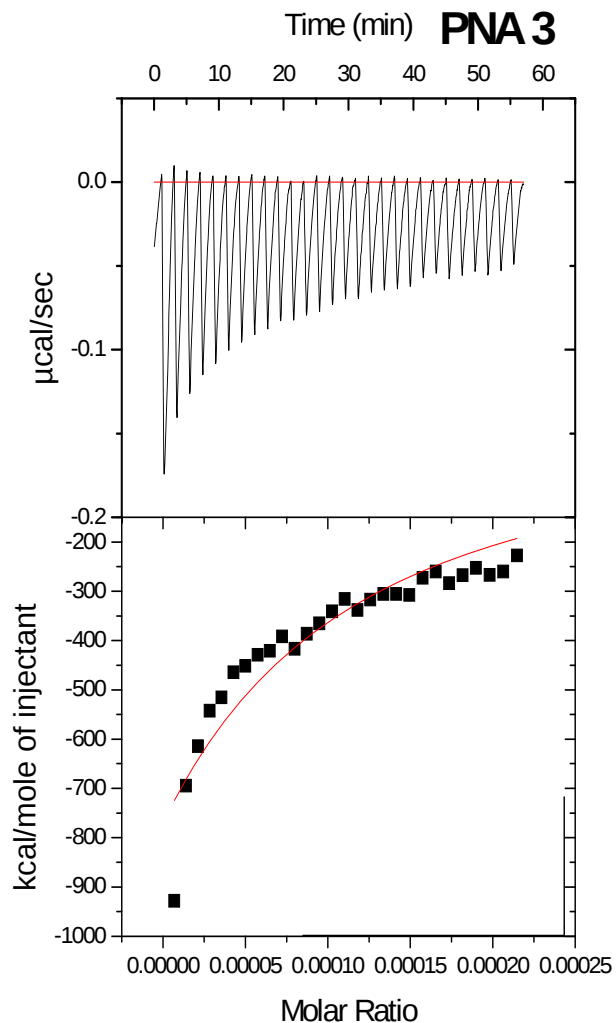
Figure SI. UV-Thermal melting of PNA under different condition: A 100mmol. Potassium-Phosphate, pH 7.0 , B 100mmol. Potassium- Phosphate with 100mmol KCl

19. ITC of Buffer and PNA P3

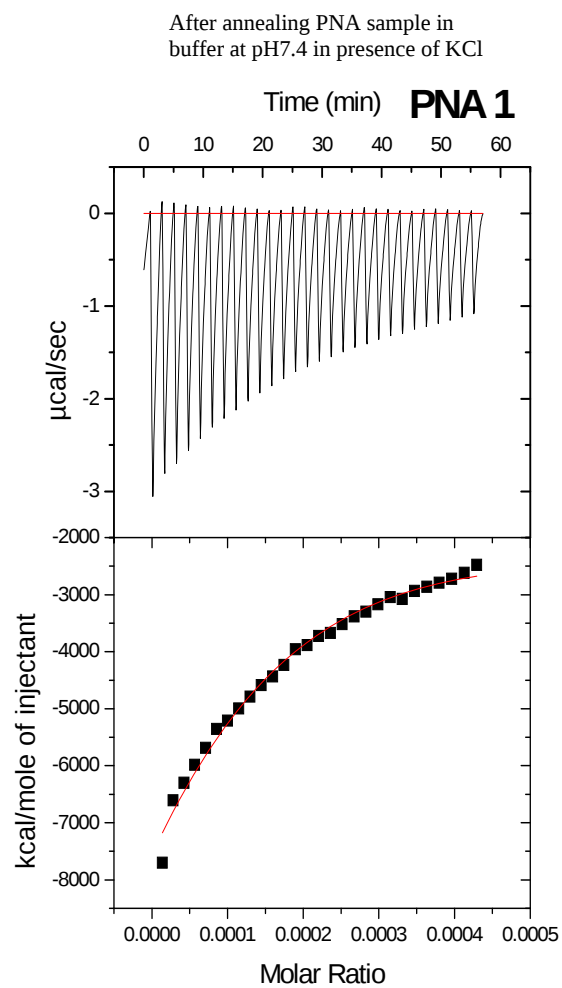
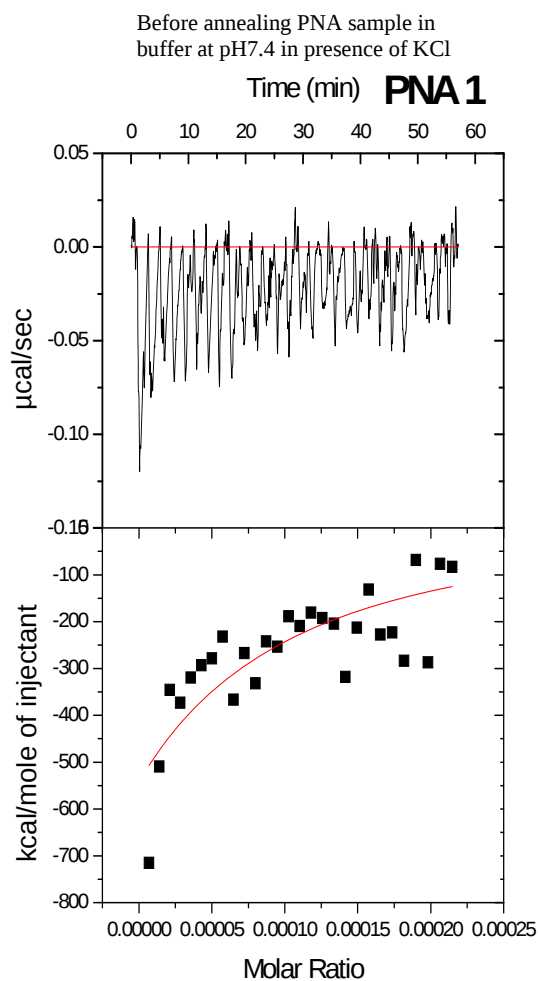
After annealing PNA sample in buffer at pH7.4 in presence of KCl



After annealing PNA sample in buffer at pH7.4 in presence of KCl

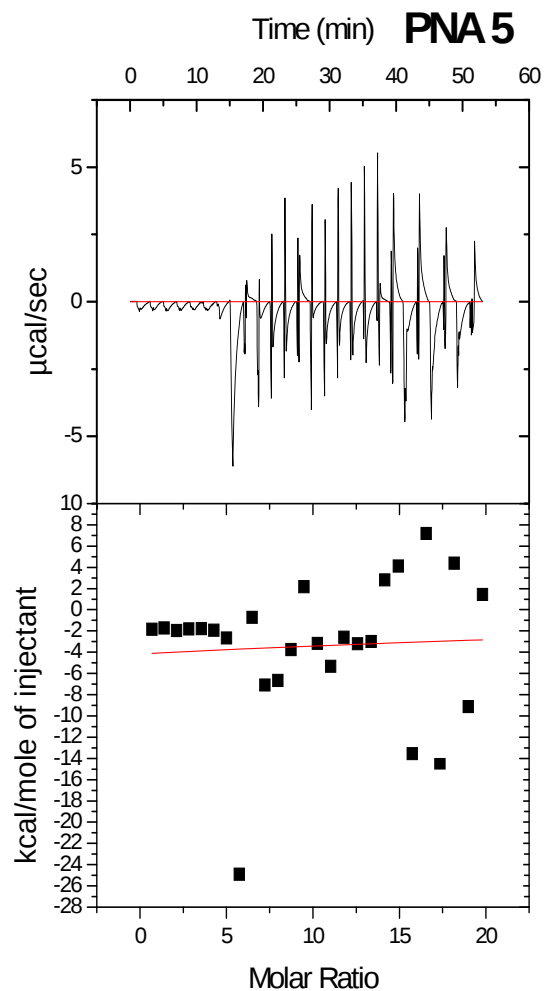


20. ITC of *aeg* and *aep*-PNA P1



21. ITC of *aeg* and *aep*-PNA P5

Before annealing PNA sample in
buffer at pH7.4 in presence of KCl



After annealing PNA sample in
buffer at pH7.4 in presence of KCl

