

Supporting Information

LNA Units Present in [*R_p*-PS]-(DNA#LNA) Chimeras Enhance the Thermal Stability of Parallel Duplexes and Triplexes Formed with (2'-OMe)-RNA Strands.

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Figure S1. A MALDI-TOF MS spectrum recorded for **RA2** [R_p -PS]-d(GGAGA_LAAGA_LGAG)
 m/z calc. 4025, found 4019.5

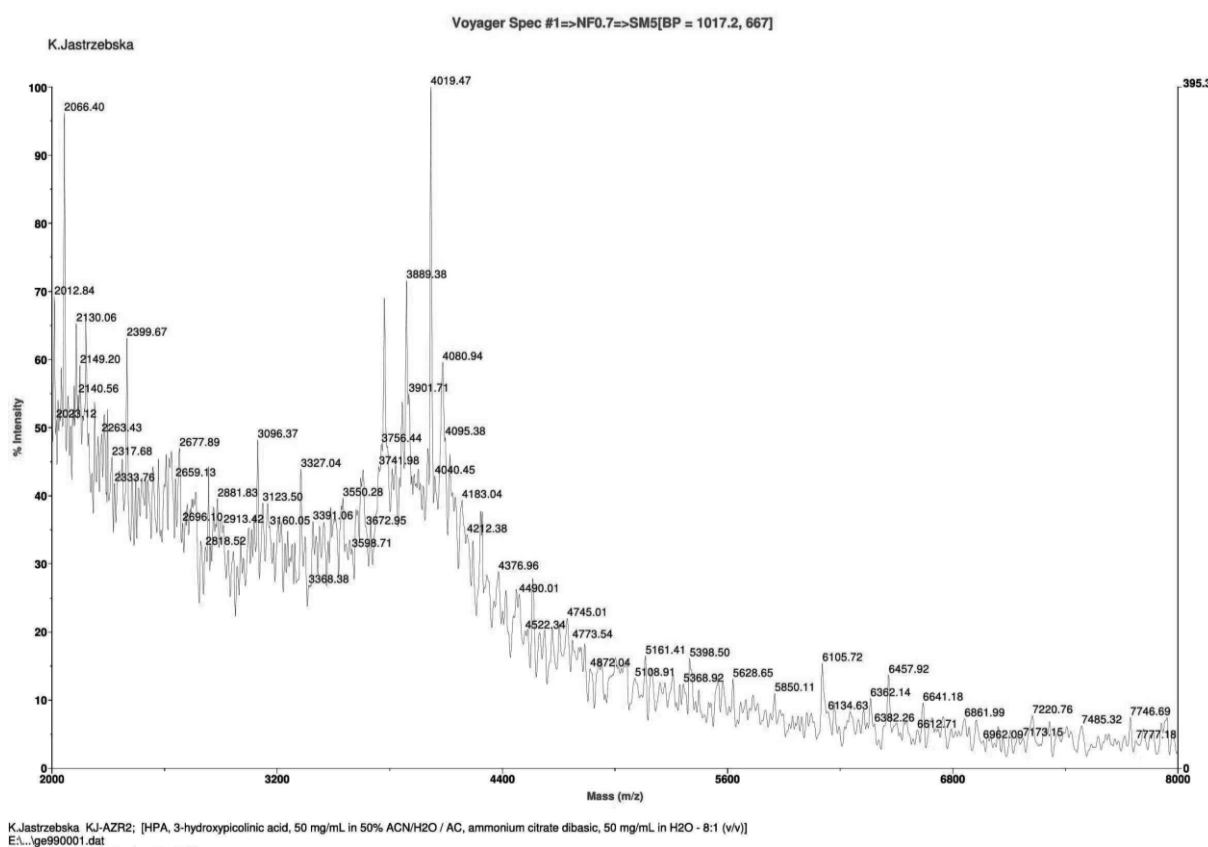


Figure S2. A MALDI-TOF MS spectrum recorded for **RA4** [*R*_p-PS]-d(GGA_LGA_LAAGA_LGAG)
m/z calc.4081, found 4075.1

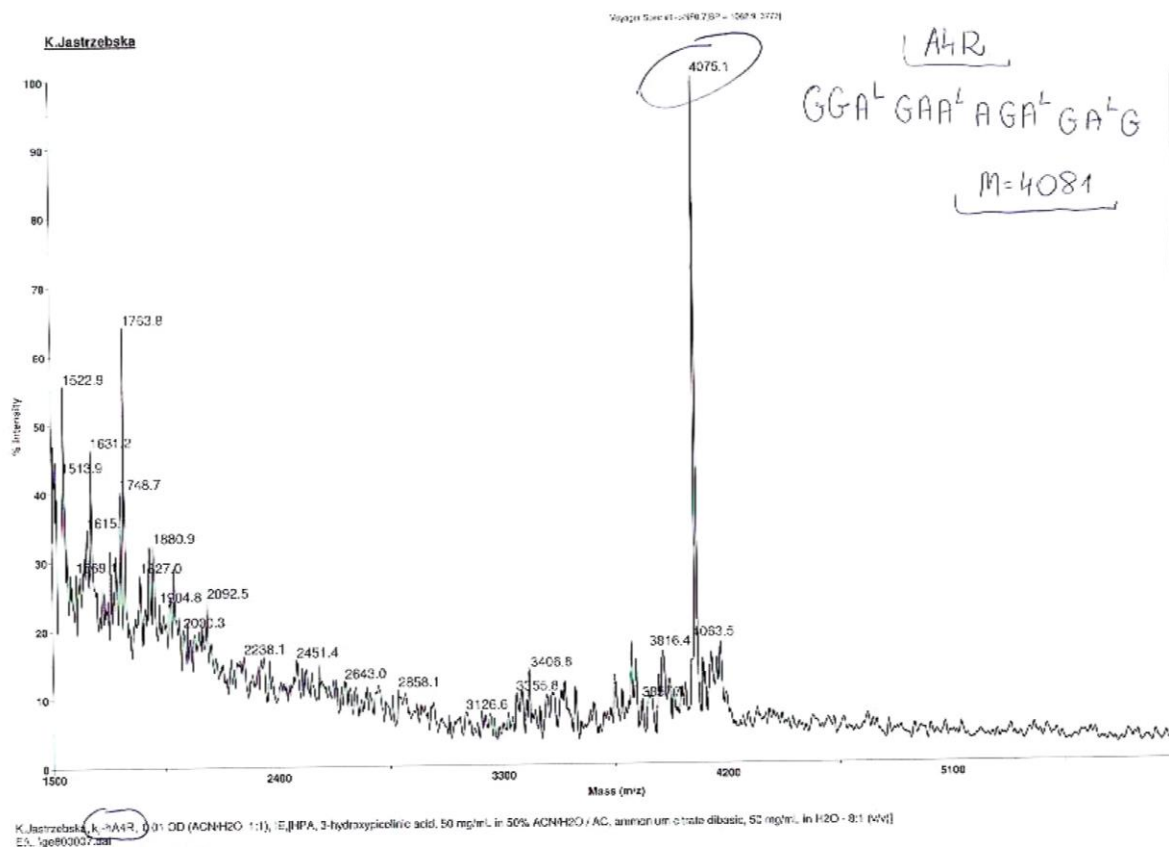
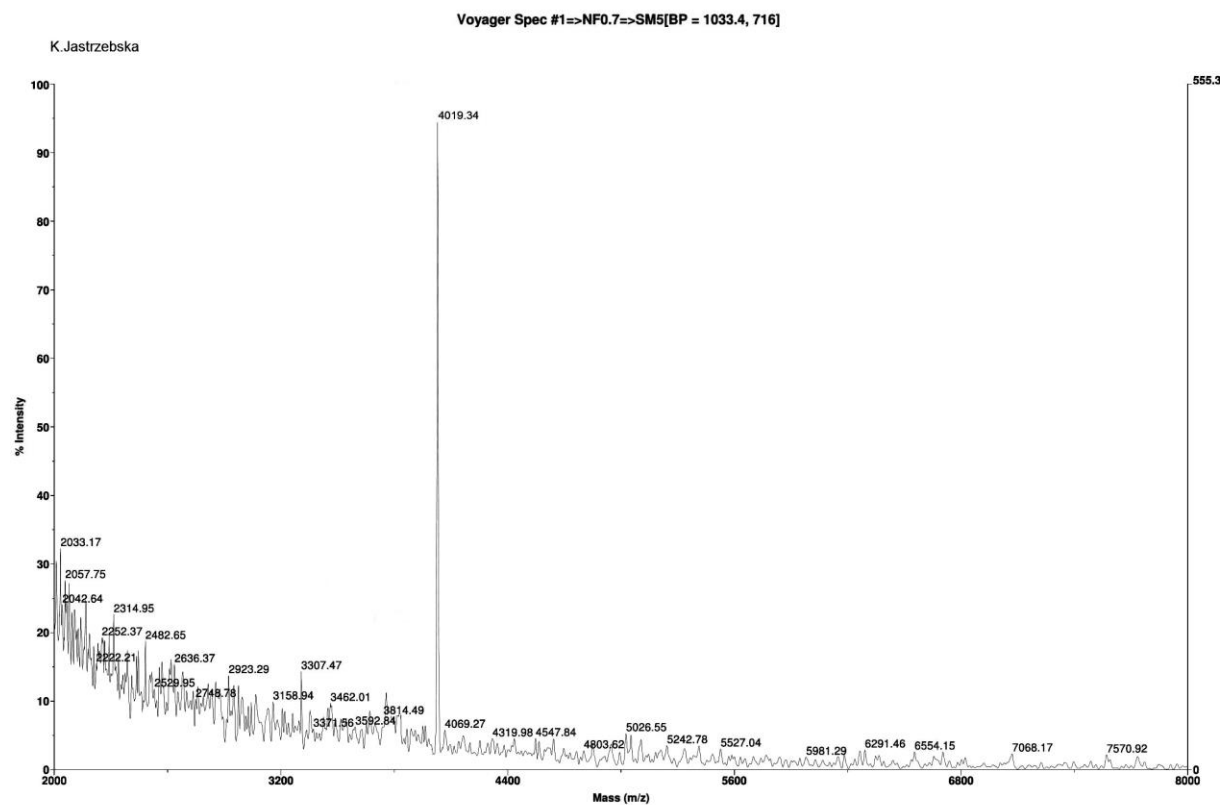
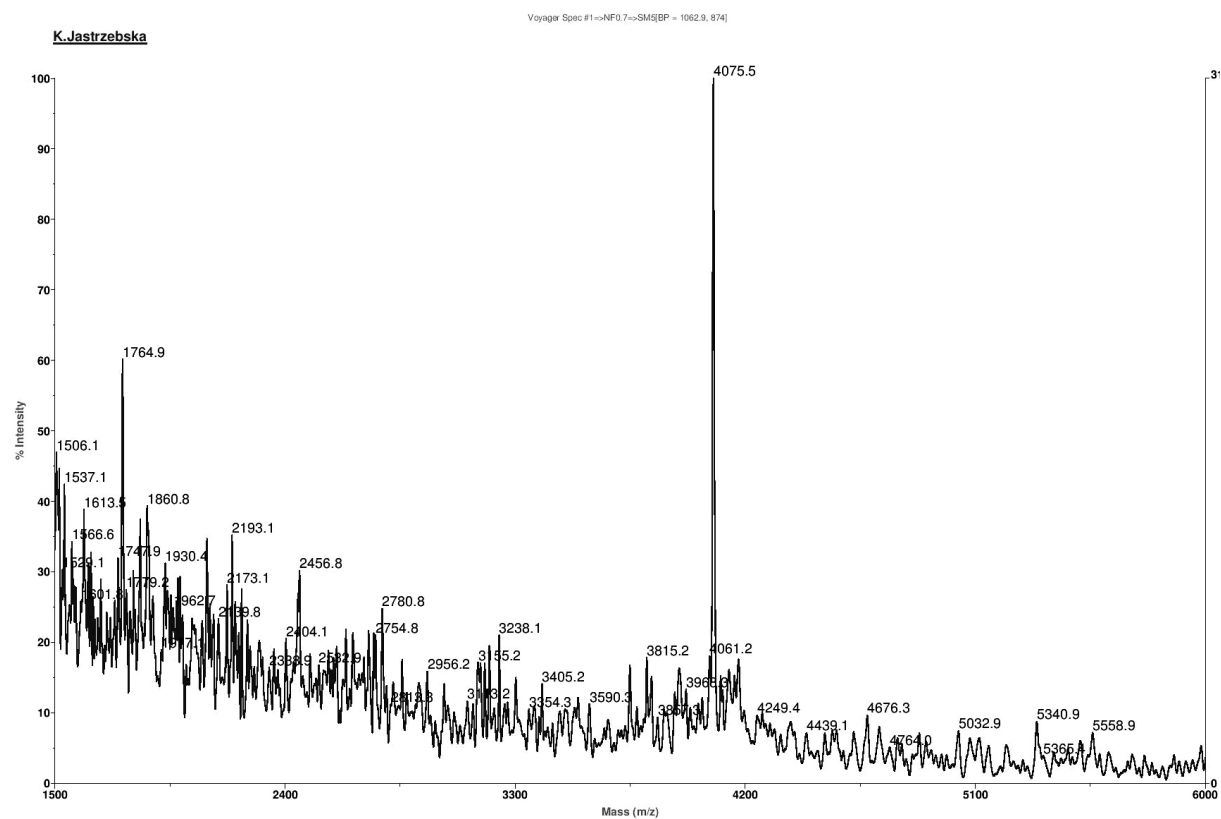


Figure S3. A MALDI-TOF MS spectrum recorded for **rG2** [*R*_P-PS]-d(GGAG_LAAAG_LAGAG)
m/z calc.4025, found 4019.3



K.Jastrzebska KJ-GZR2: [HPA, 3-hydroxypicolinic acid, 50 mg/mL in 50% ACN/H₂O / AC, ammonium citrate dibasic, 50 mg/mL in H₂O - 8:1 (v/v)]
E:\...lf010005.dat

Figure S4. A MALDI-TOF MS spectrum recorded for **rG4** [*R*_P-PS]-d(GG_LAG_LAAAG_LAG_LAG)
m/z calc.4081, found 4075.5



K.Jastrzebska, KJ-G4R1, 0.01 OD (ACN/H2O 1:1), IE,[HPA, 3-hydroxypicolinic acid, 50 mg/mL in 50% ACN/H2O / AC, ammonium citrate dibasic, 50 mg/mL in H2O - 8:1 (v/v)]
E:\...ge790004.dat

Figure S5. A MALDI-TOF MS spectrum recorded for **sg4** [S_P-PS]-d(GG_LAG_LAAAG_LAG_LAG)
m/z calc.4081, found 4078.2

KJ-G4S Jastrzebska K ; linear neg.
Matrix: HPA 50 mg/mL H₂O/ACN 1:1 v/v, AC 50 mg/mL H₂O/ACN 1:1 v/v; HPA/AC 8:1
Data: gh350001.G11[c] 9 Mar 2016 10:33 Cal: T6_T12_26_09_12 26 Sep 2012 13:32
Shimadzu Biotech Axima Performance 2.9.1.20100121; Mode Linear_neg Power: 114, Blanked, P.Ext. @ 4000 (bin 90)
%Int. 6.5 mV[sum= 1300 mV] Profiles 1-200 Smooth Av 25 -Baseline 1000

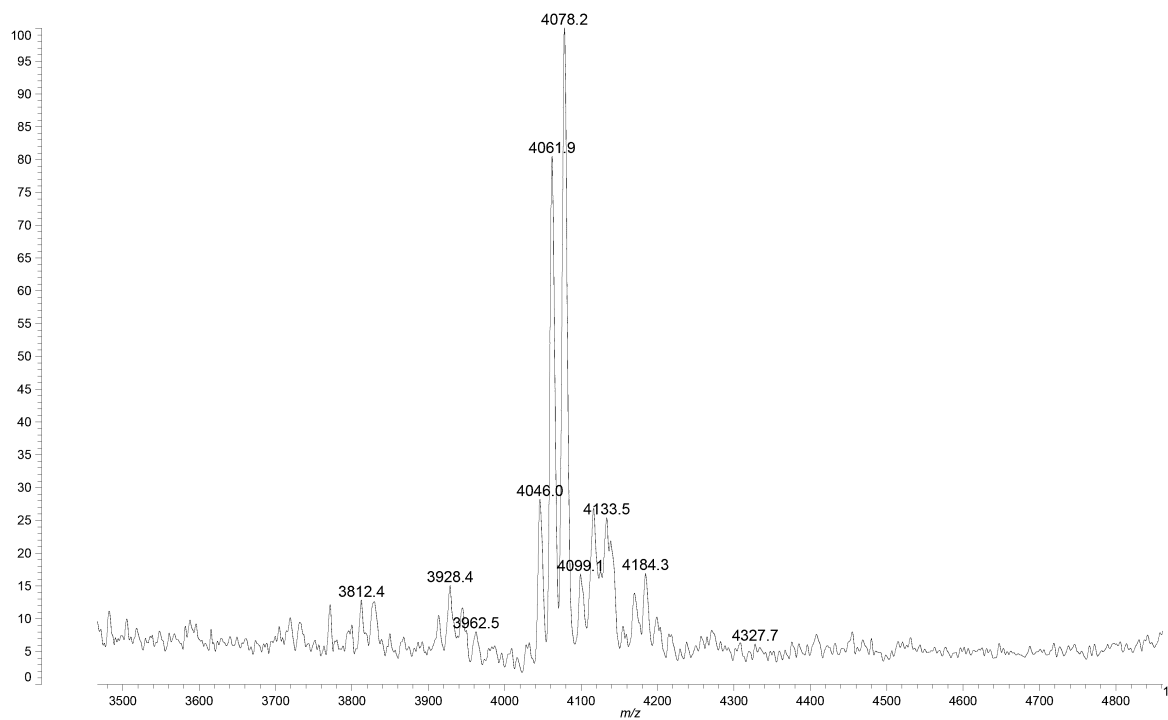


Figure S6. Normalized melting profiles recorded for the complexes formed by G4 with wR12 or hR12 in 7.2 buffer.

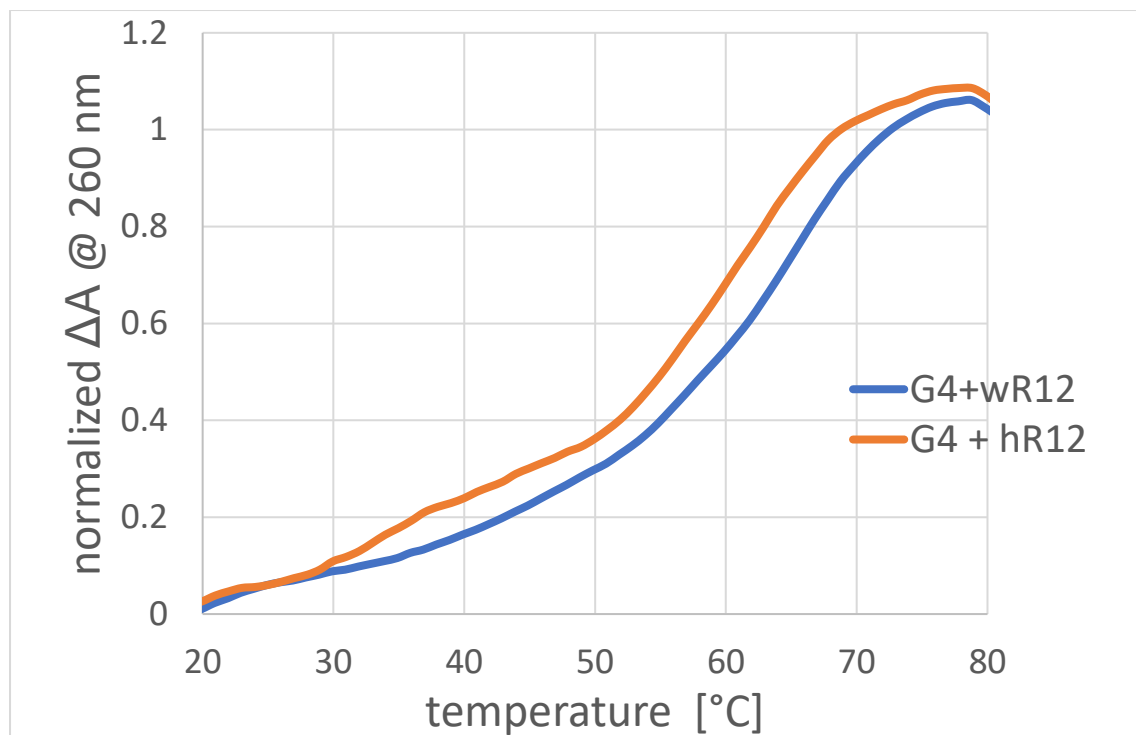


Figure S7. CD spectra recorded for complexes formed by **rB0** with 12 nt mRNAs in pH 7.2 buffer

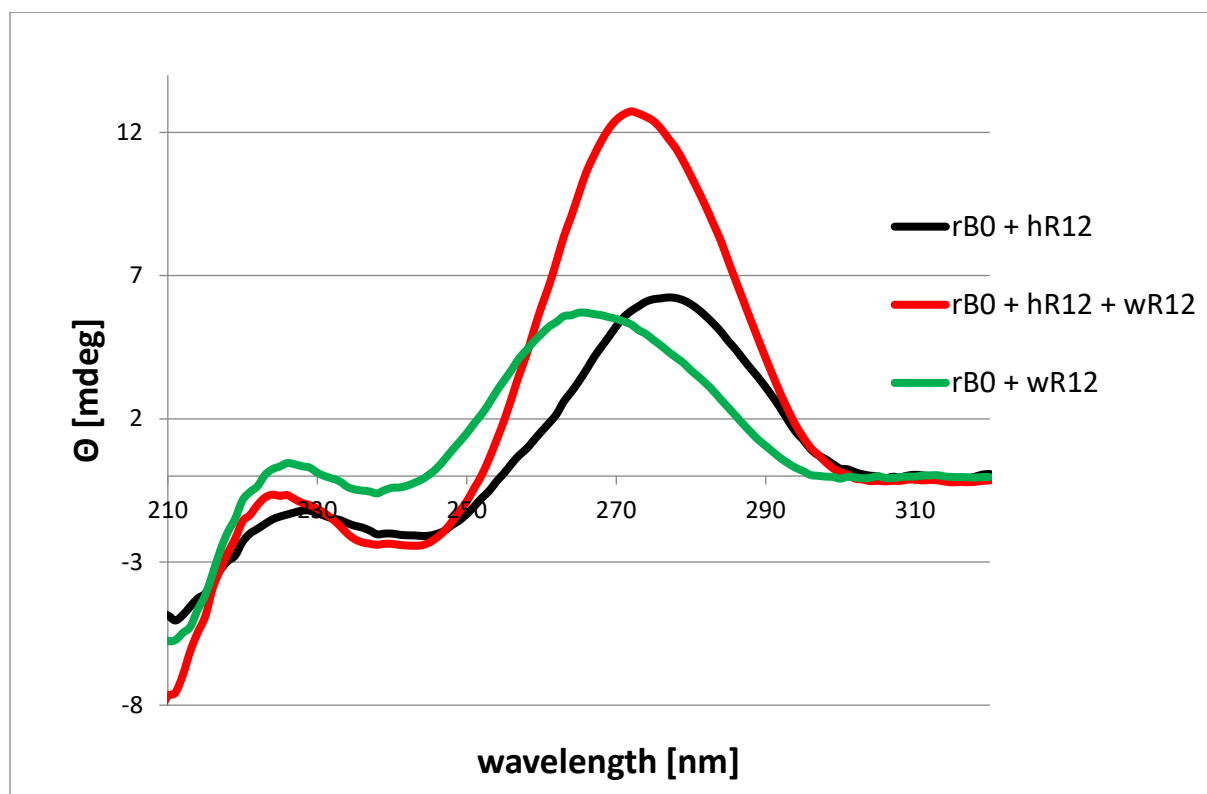


Figure S8. Chromatogram from RP-HPLC (DMT-off) purification of the **rA2** oligomer

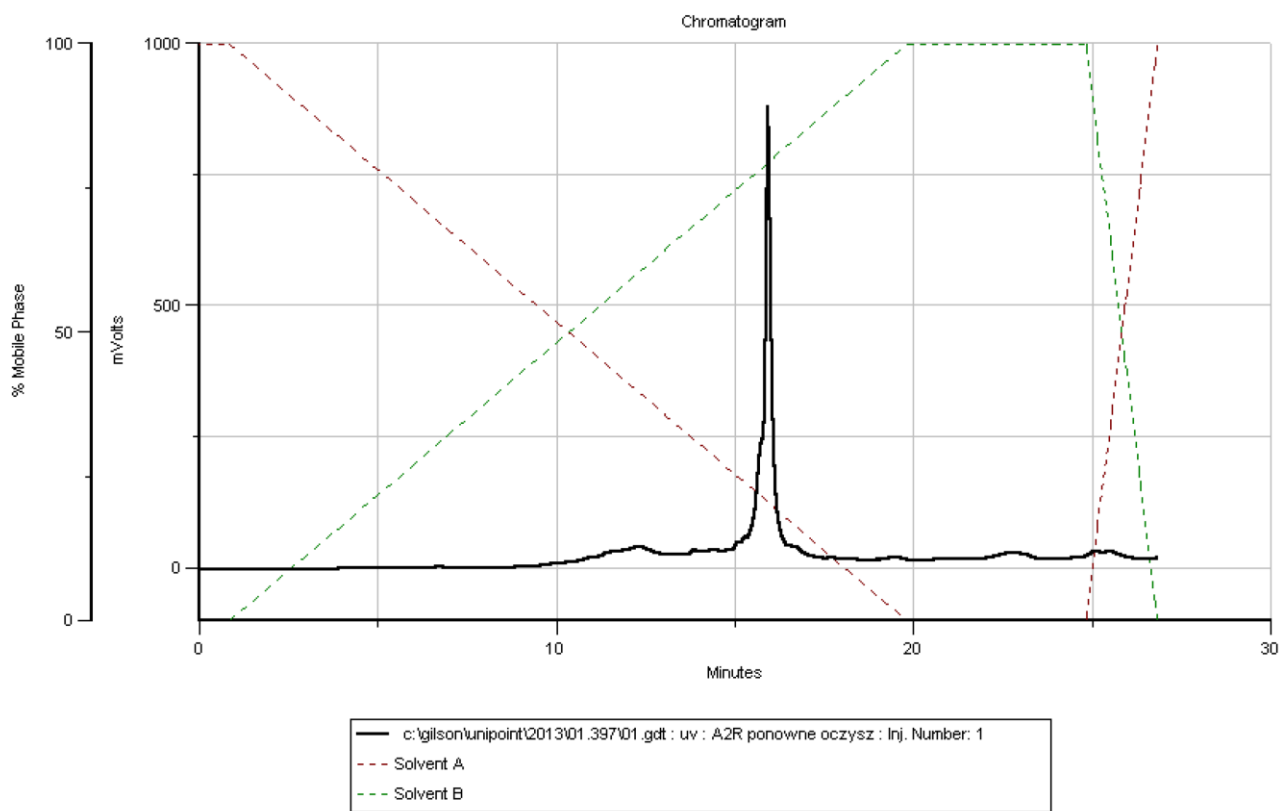


Figure S9. Chromatogram from RP-HPLC (DMT-off) purification of the **rA4** oligomer.

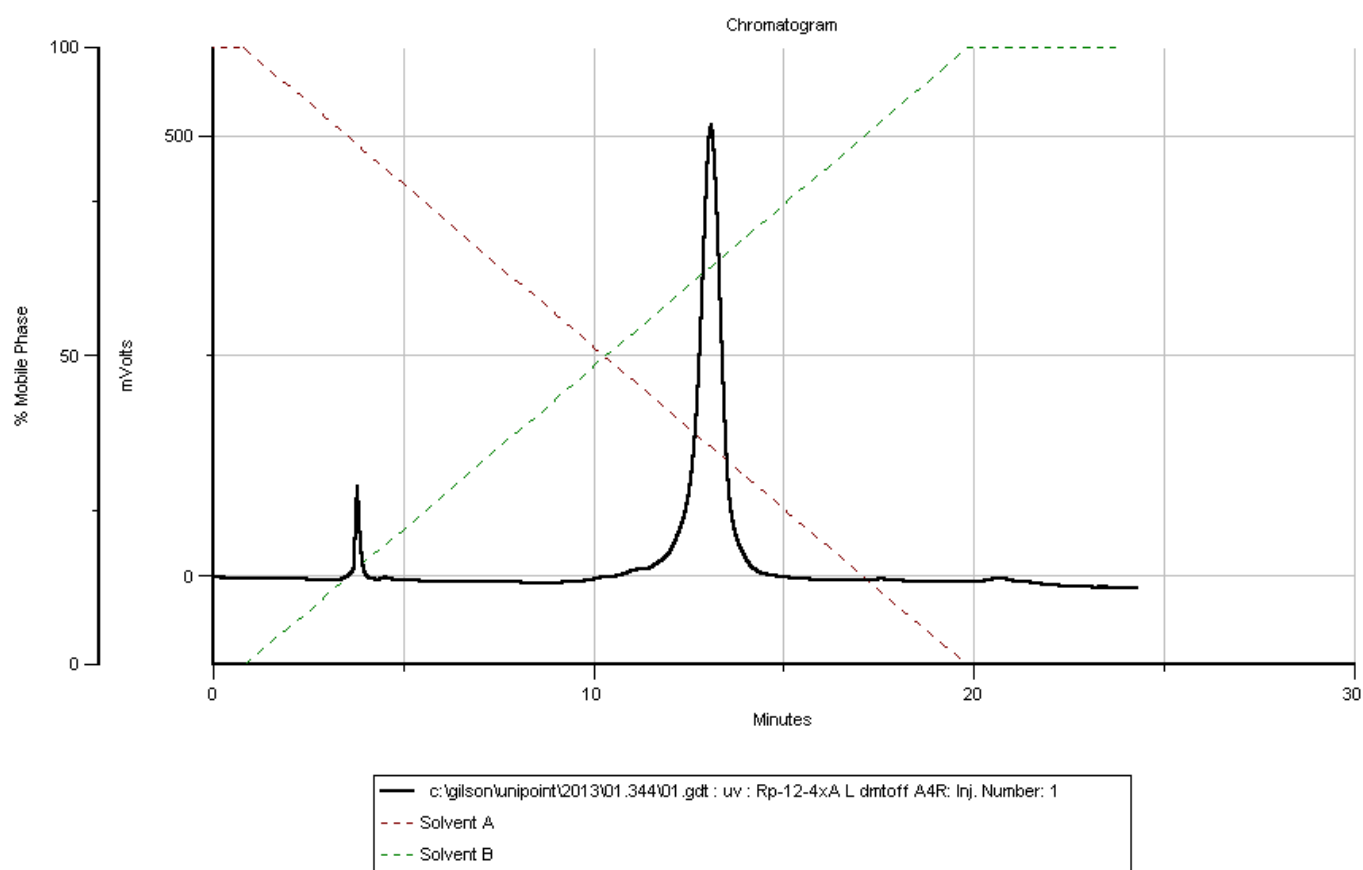


Figure S10. Chromatogram from RP-HPLC (DMT-off) purification of the **rG2** oligomer.

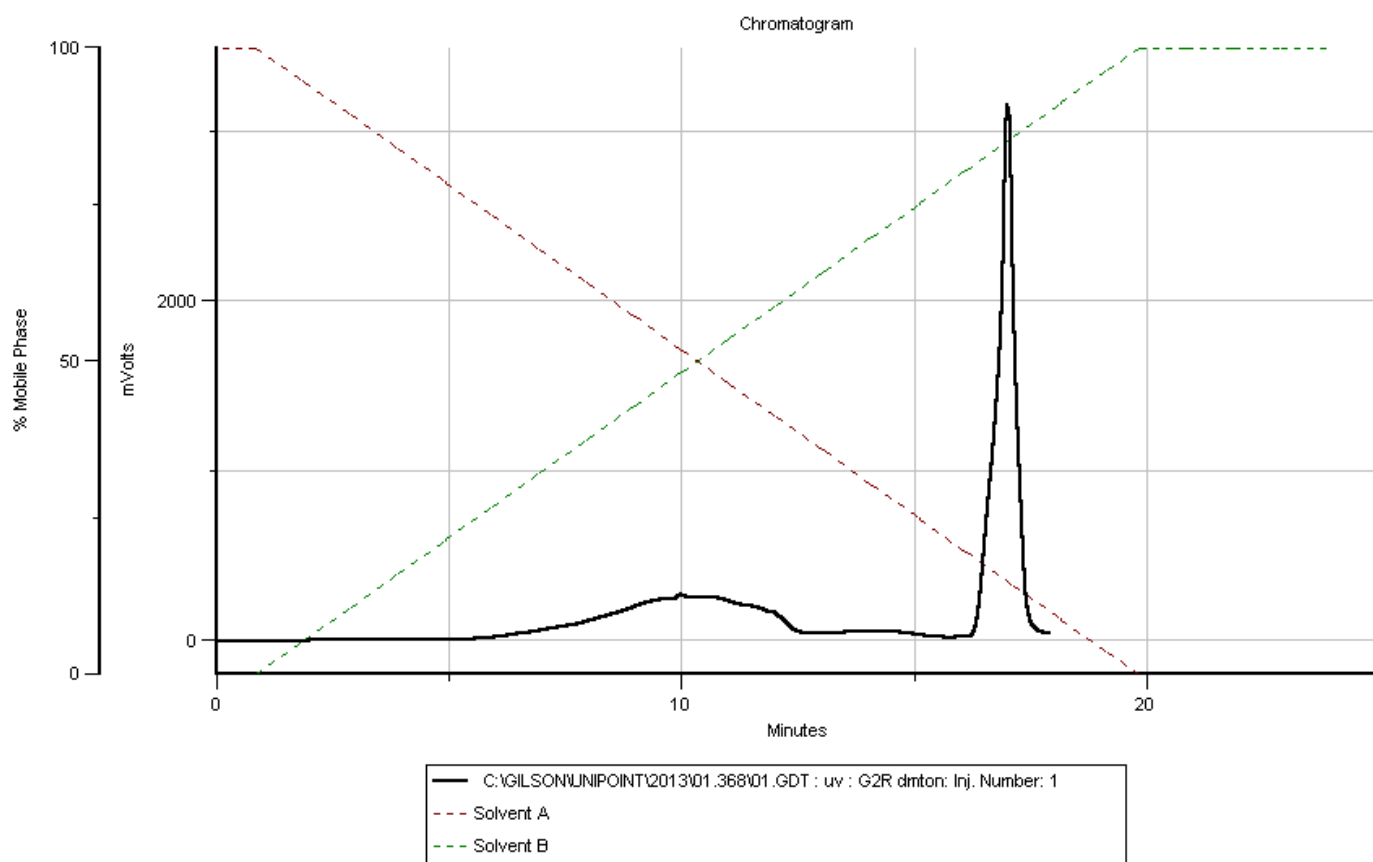


Figure S11. Chromatogram from RP-HPLC (DMT-off) purification of the **rG4** oligomer.

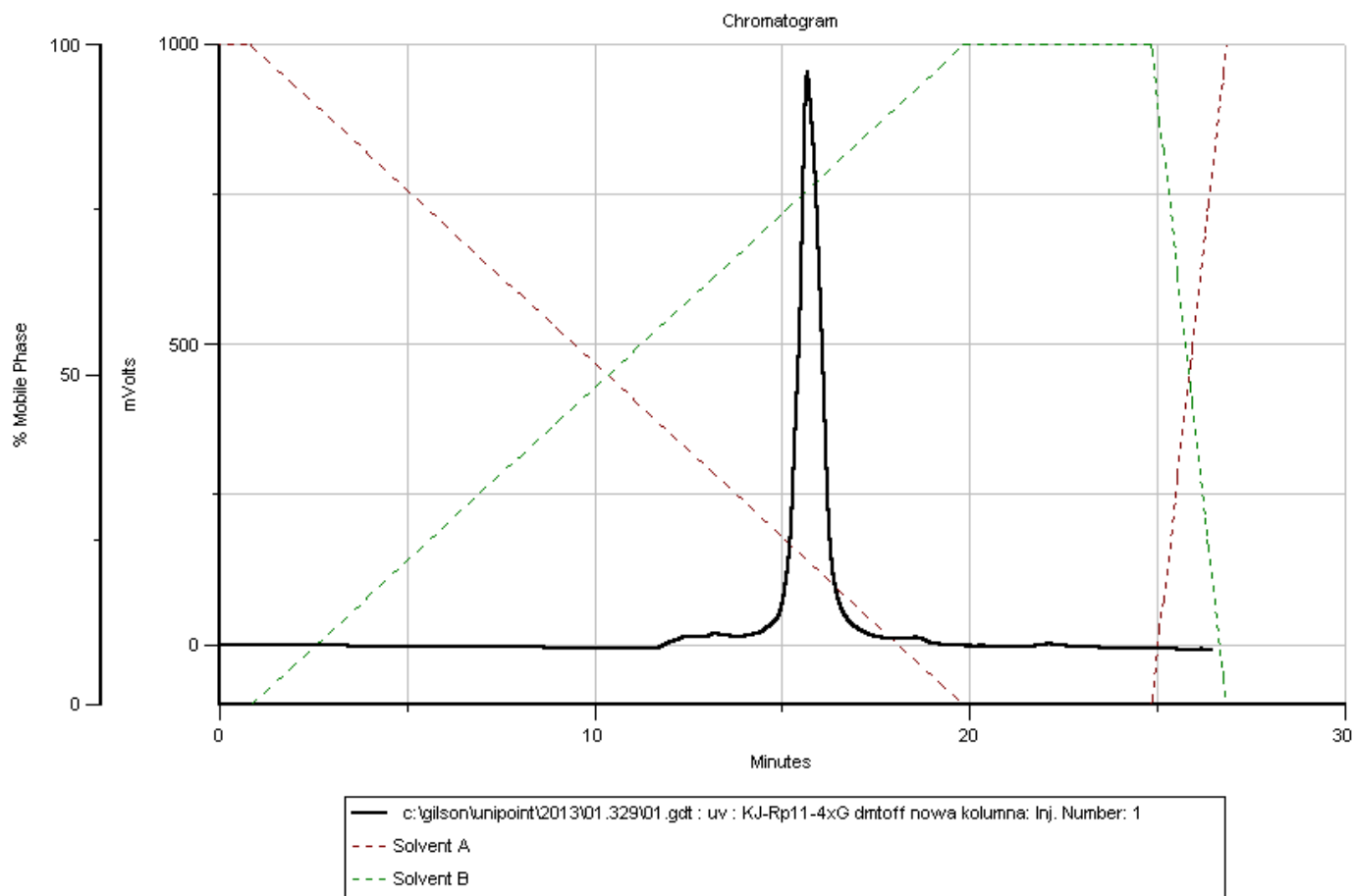


Figure S12. Chromatogram from RP-HPLC (DMT-off) purification of the **sG4** oligomer.

