

Supplementary Materials

Energy Dissipation Hypothesis Applied to Enhance the Affinity of Thrombin Binding Aptamer

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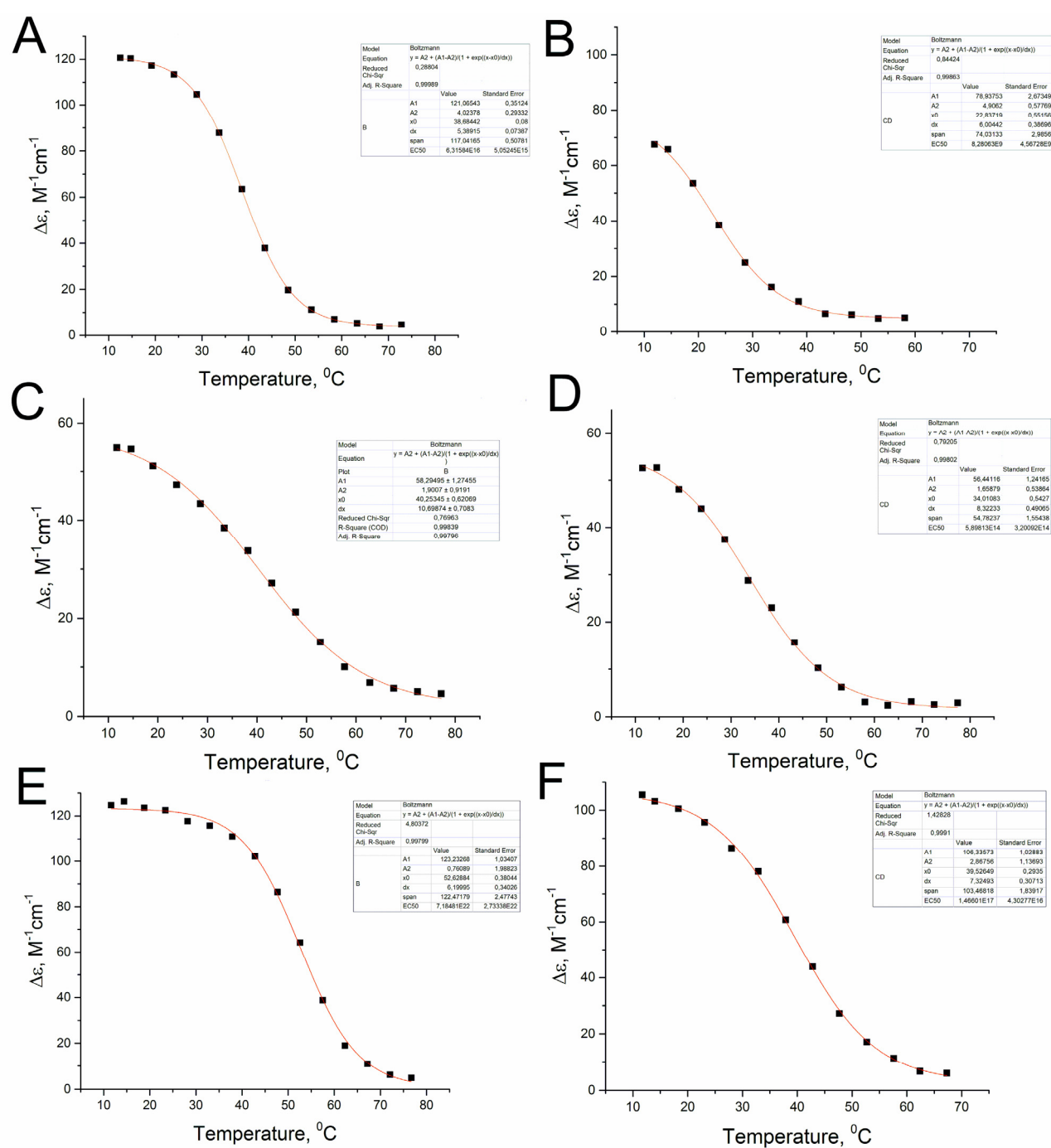


Figure S1. Melting curves of G-quadruplexes acquired from circular dichroism spectra at wavelength of 295 nm. A – K⁺-coordinated HD1; B – Na⁺-coordinated HD1; C – K⁺-coordinated carboxy-T4,T13-HD1; D – Na⁺-coordinated carboxy-T4,T13-HD1; E – K⁺-coordinated biotinylated-T4,T13-HD1; F – Na⁺-coordinated biotinylated-T4,T13-HD1.

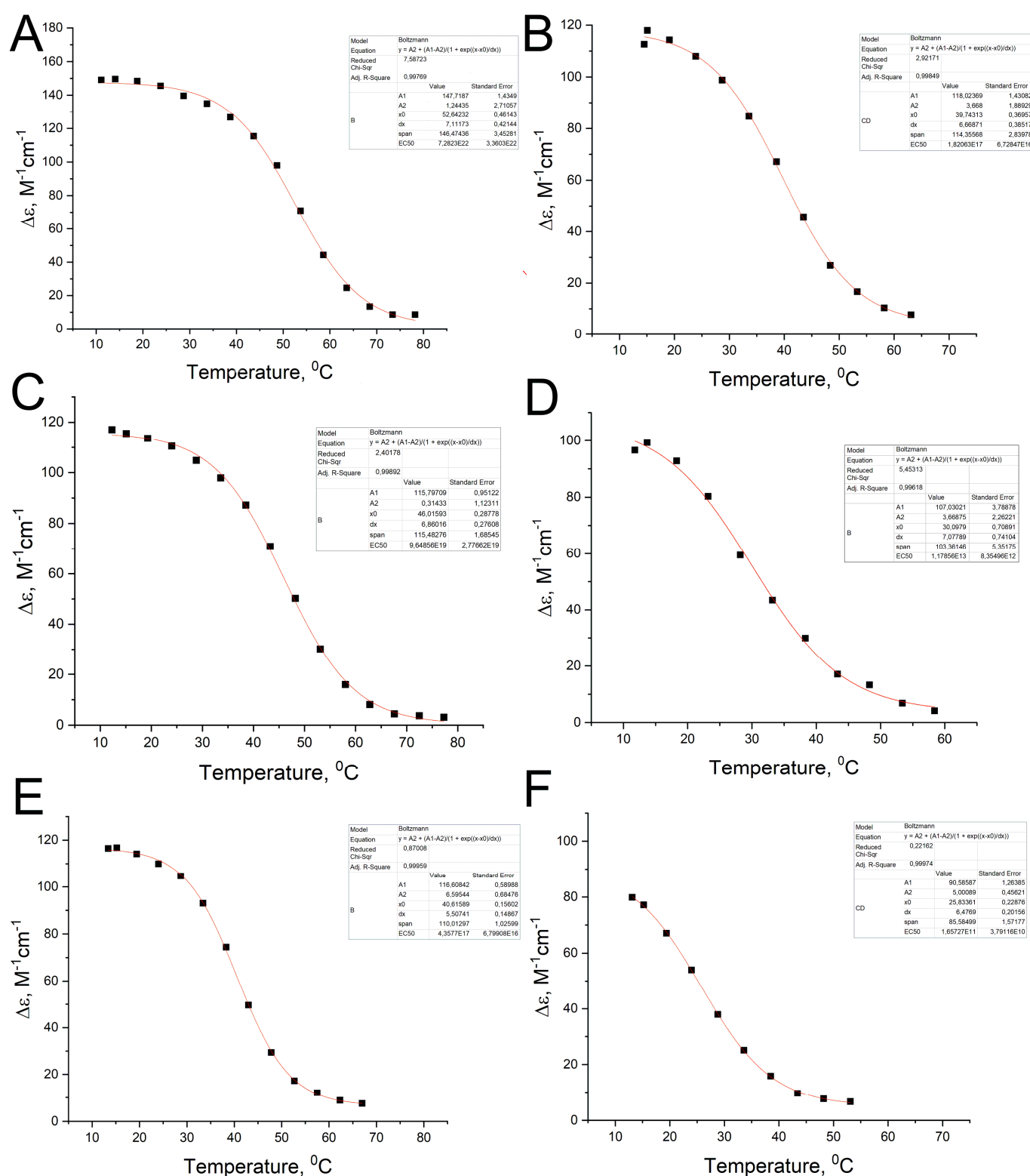


Figure S2. Melting curves of G-quadruplexes acquired from circular dichroism spectra at wavelength of 295 nm. A – K⁺-coordinated amino-T4,T13-HD1; B – Na⁺-coordinated amino-T4,T13-HD1; C – K⁺-coordinated amino-T13-HD1; D – Na⁺-coordinated amino-T13-HD1; E – K⁺-coordinated amino-T3,T12-HD1; F – Na⁺-coordinated amino-T3,T12-HD1.

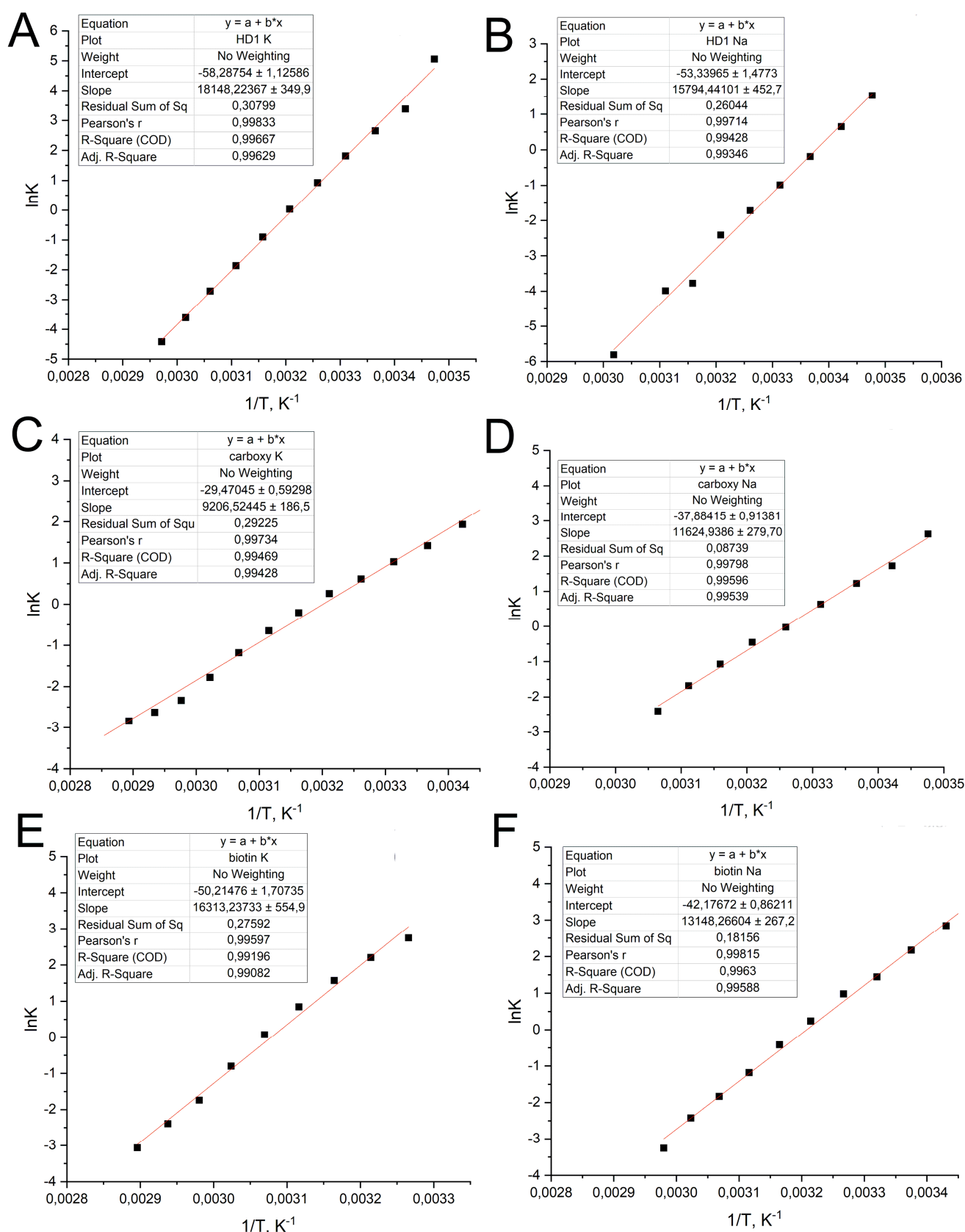


Figure S3. Linearization of melting curves in the coordinates $\ln K(1/T)$ used for the calculations of thermodynamic parameters. A – K+-coordinated HD1; B – Na+-coordinated HD1; C – K+-coordinated carboxy-T4,T13-HD1; D - Na+-coordinated carboxy-T4,T13-HD1; E – K+-coordinated biotinylated-T4,T13-HD1; F – Na+-coordinated biotinylated-T4,T13-HD1.

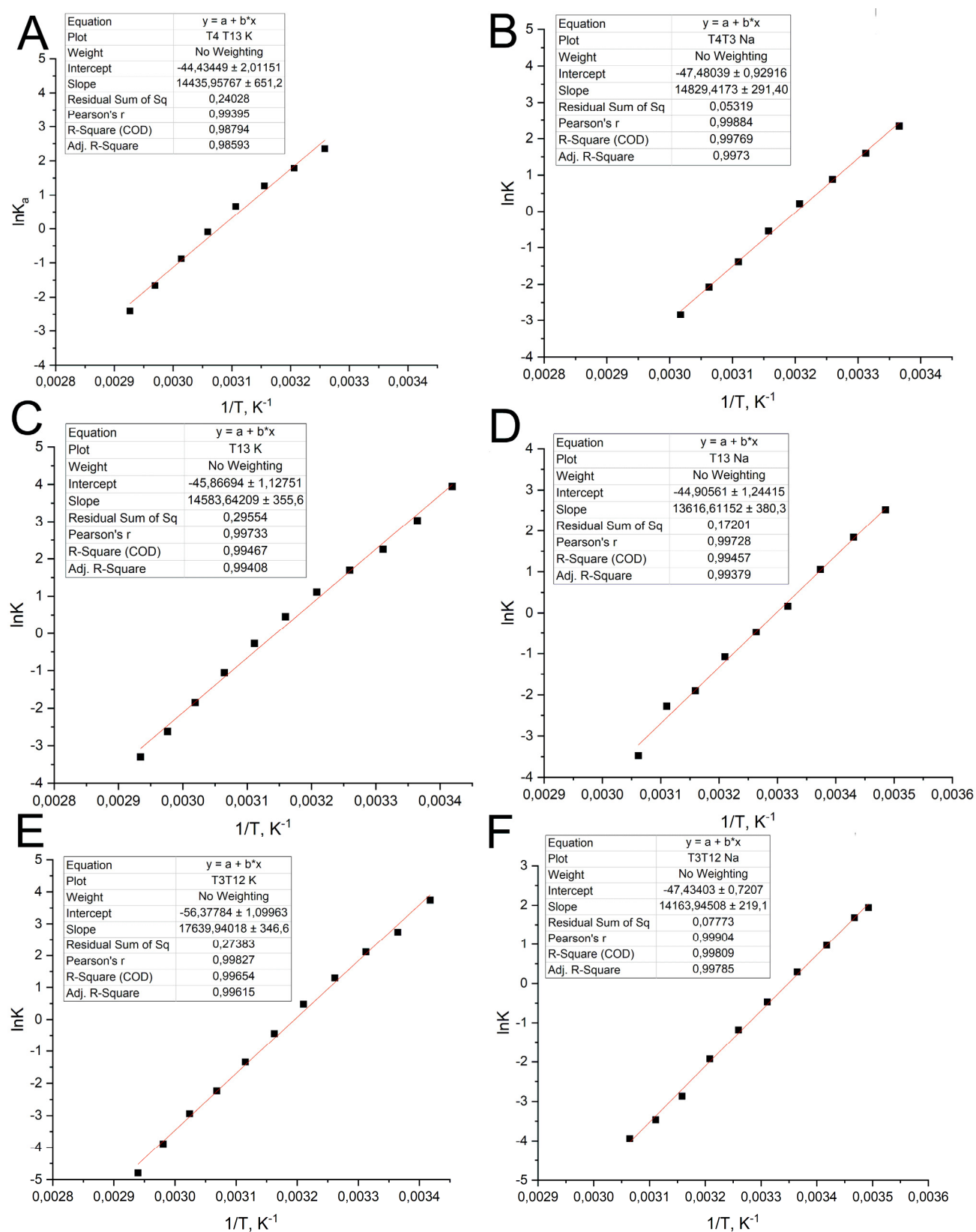


Figure S4. Linearization of melting curves in the coordinates $\ln K(1/T)$ used for the calculations of thermodynamic parameters. A – K+-coordinated amino-T4,T13-HD1; B – Na+-coordinated amino-T4,T13-HD1; C – K+-coordinated amino-T13-HD1; D – Na+-coordinated amino-T13-HD1; E – K+-coordinated amino-T3,T12-HD1; F – Na+-coordinated amino-T3,T12-HD1.