

## Supplementary Data

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# **2'-Deoxyimmunosine: Stereoselective Synthesis, Base Pairing and Duplex Stability of Oligonucleotides Containing 8-Oxo-7- thiaguanine**

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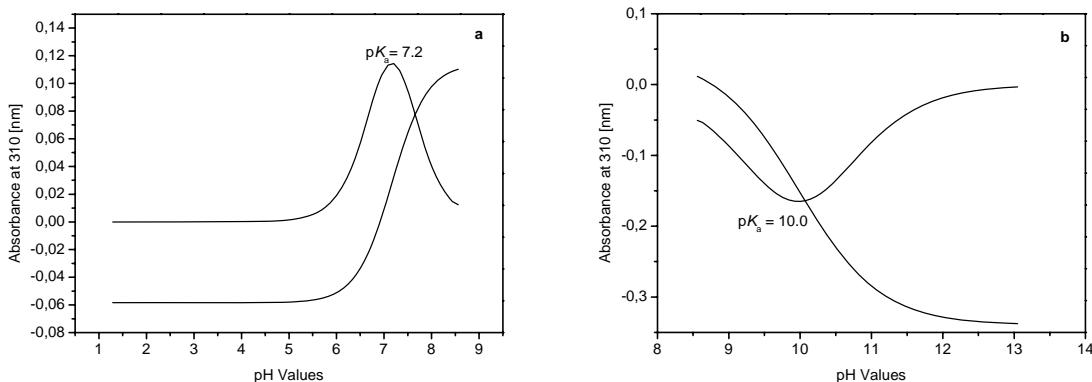
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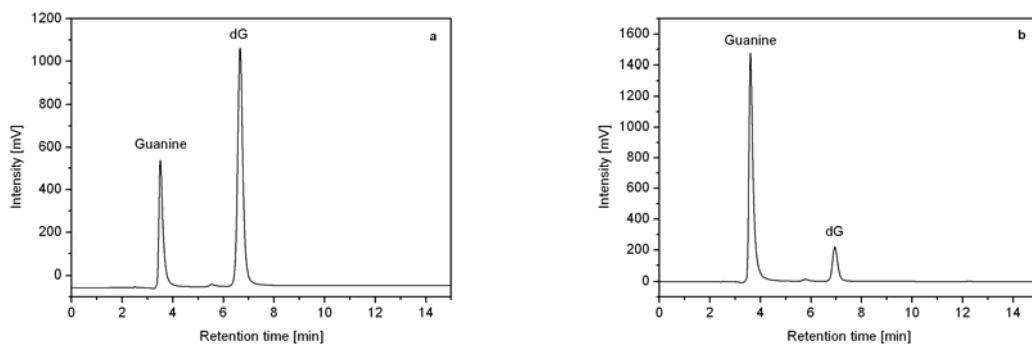
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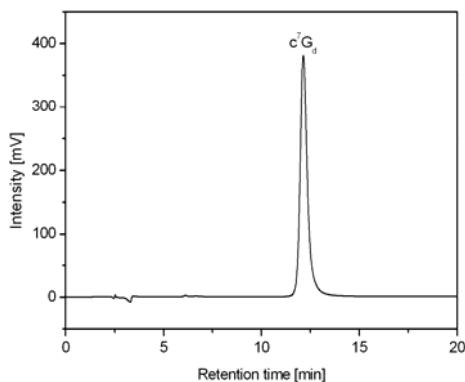
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**Figure S1**  $pK_a$  Titraton profiles of compound 5, a) from pH 1.2 to 8.6; b) from pH 8.6 to 13.5 measured at 310 nm.  $pK_a$  values are given as inserts.



**Figure S2** Reversed-phase HPLC profiles (column 250 × 4 mm, RP-18) of the hydrolysis mixture of dG in 0.5 M HCl at room temperature. (a) 10 min and (b) 50 min. Buffer: 5% MeCN in 0.1 M ( $\text{Et}_3\text{NH}$ )OAc, pH = 7.0, 1.0 mL/min. The profile was measured at 255 nm.



**Figure S3** Reversed-phase HPLC profiles (250 × 4 mm, RP-18) of the hydrolysis mixture of 2'-deoxy-7-deazaguanosine ( $c^7\text{G}_d$ ) in 0.5 M HCl at room temperature for 50 min. HPLC elution buffer: 5% MeCN in 0.1 M ( $\text{Et}_3\text{NH}$ )OAc, pH = 7.0, 1.0 mL/min. The profile was measured at 259 nm.