

Electronic Supplementary Information

8-Oxo-7,8-dihydro-2'-deoxyguanosine and abasic site tandem lesions are oxidation prone yielding hydantoin products that strongly destabilize duplex DNA

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Figure 1. Method to determine dOG oxidation products in dsODNs

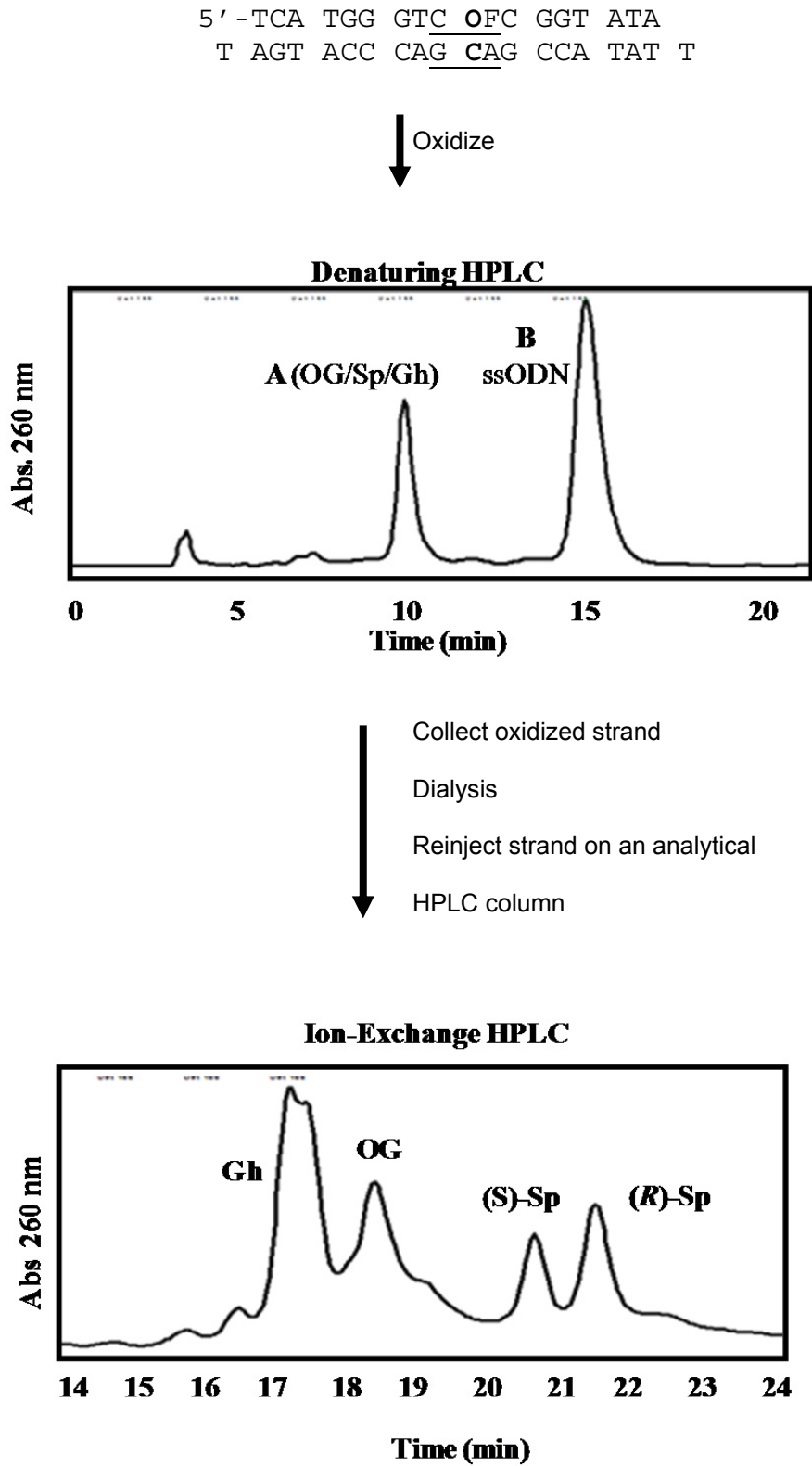


Figure 2. Products observed with F in the complementary strand to dOG (O)

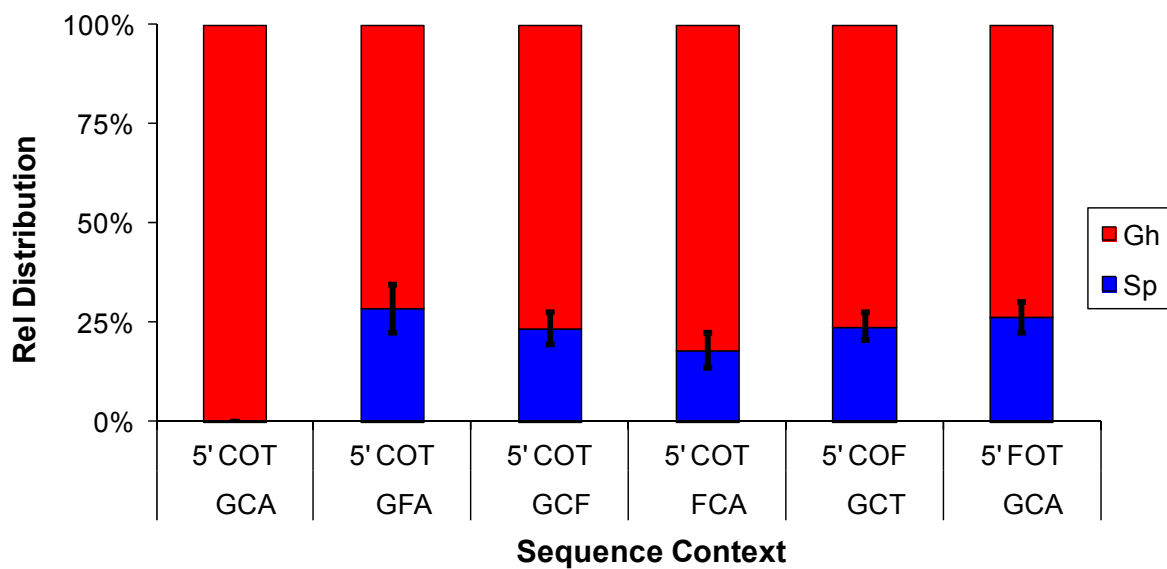


Figure 3. Ratios of the dSp diastereomers with F in the complementary strand to dOG (O)

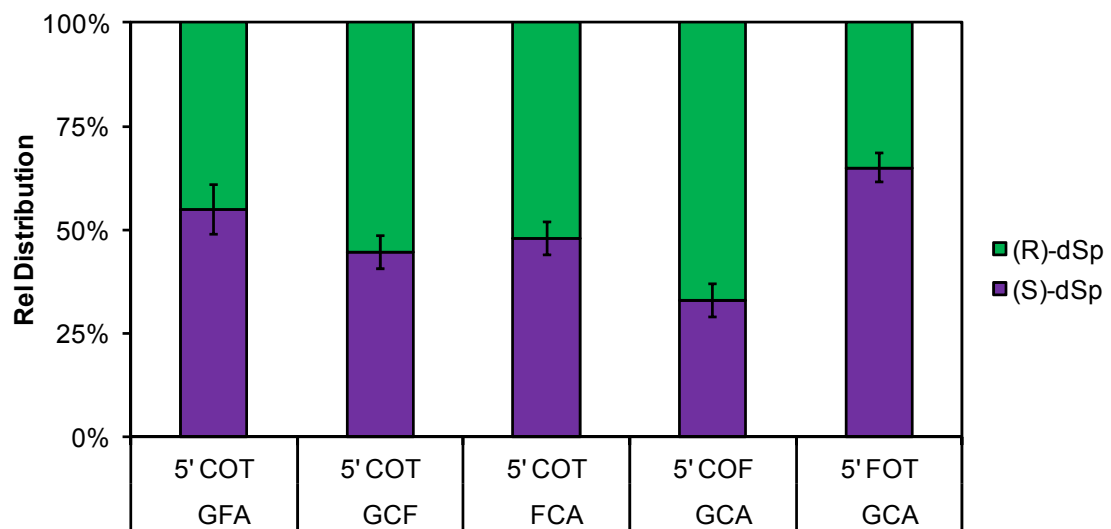
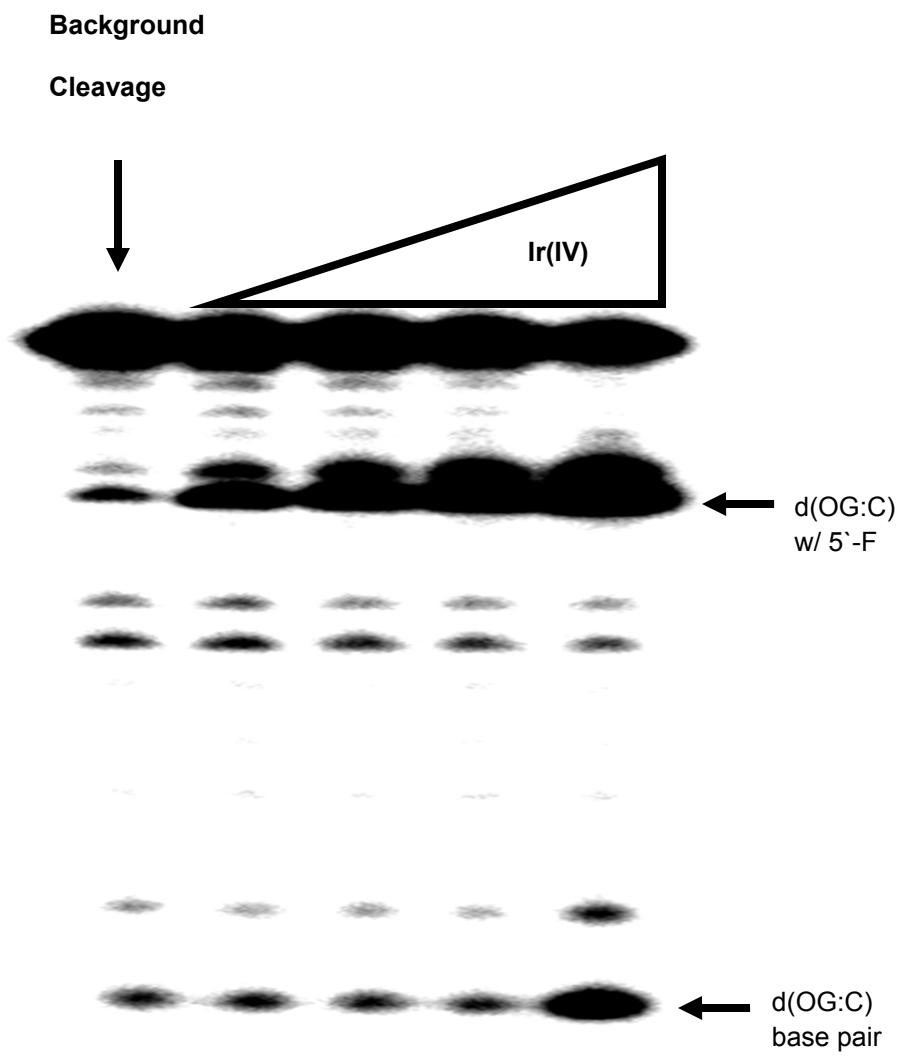
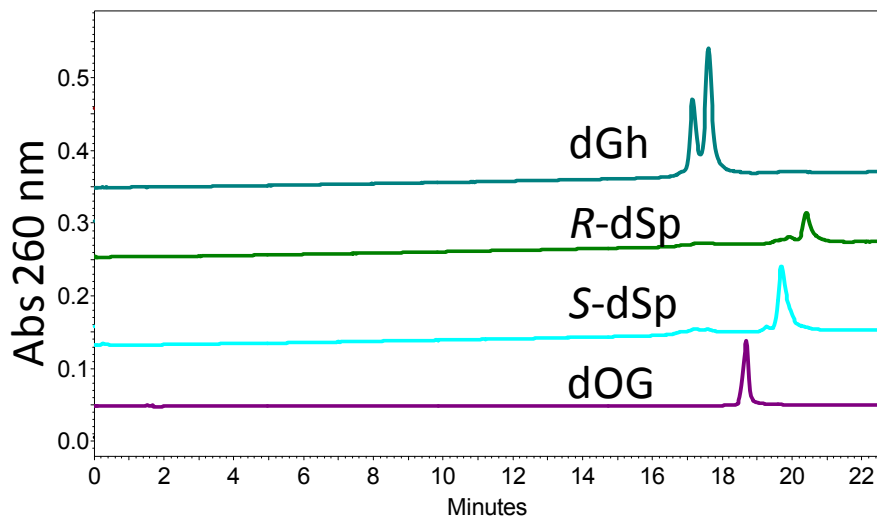


Figure 4. Method to measure the context dependency in the relative reactivity of dOG (O)

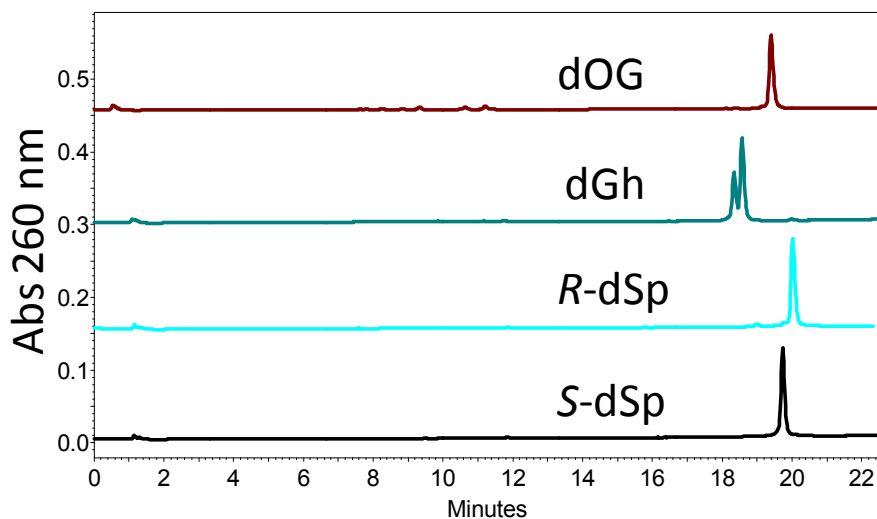


5'-TTG AGC COT CAG ATG TFO TCG CTG
 AAC TCG GCA GTC TAC AGC AGC GAC

Figure 5. Example HPLC traces showing purity of a ssODN with dOG, dGh, or the dSp isomers



The traces are for the sequence 5'- TC ATG GGT FX T CGG TAT A-3' where X = dOG, dGh, (S)-dSp, or (R)-dSp.



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