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ADDITIONS & CORRECTIONS

Enhanced Base Pairing and Replication Efficiency of Thiothymidines, Expanded-size Variants of Thymidine [*J. Am. Chem. Soc.* **2006,** *128,* 396–397]. Herman O. Sintim and Eric T. Kool*

Page 396. In Figure 2 (11th entry of 12), the T_m of the **4S**-G mismatch should be 32 °C rather than 42.3 °C. Similarly, the 11th entry in Table S1 (Supporting Information) should be 32 °C rather than 42.3 °C. The error appears to have arisen from a preparation of an oligonucleotide that contained the desired **4S** base along with its ammonolysis product (cytidine), resulting in an anomalously high T_m. We have repeated all the hybridization experiments in this report and confirm all the other T_m values. We caution experimenters to treat the **4S** base carefully during DNA deprotection (even in the presence of sodium hydrosulfide)[1] and recommend using milder deprotection methods.[2] We regret the error, and we thank Drs. R. Eritja and M. Orozco for pointing out the problem.

As a result of this new data point, the explanation of a high T_m for the **4S**-G mismatch based on a tautomer of **4S** is moot. However, the overall conclusions of the paper, which support the use of thiothymidines for enhanced selectivity in hybridization and replication, still stand.

Supporting Information Available: Experimental procedures, additional data, and compound characterization (corrected). This material is available free of charge via the Internet at http://pubs.acs.org.

Literature Cited

(1) Coleman, R. S.; Kesicki, E. A. *J. Am. Chem. Soc.* **1994**, *116*, 11636–11642.
(2) Christopherson, M. S.; Broom, A. D. *Nucleic Acids Res.* **1991**, *19*, 5719–5724.

Overhauser Dynamic Nuclear Polarization To Study Local Water Dynamics [*J. Am. Chem. Soc.* **2009,** *131,* 4641–4647]. Brandon D. Armstrong and Songi Han*

Page 4643. The third term of the denominator of eq 7 incorrectly reads $2\omega\tau$. It should be $\omega\tau$. The correct equation is as follows:

$$J(\omega, \tau) = \frac{1 + \frac{5\sqrt{2}}{8}(\omega\tau)^{1/2} + \frac{\omega\tau}{4}}{1 + (2\omega\tau)^{1/2} + (\omega\tau) + \frac{\sqrt{2}}{3}(\omega\tau)^{3/2} + \frac{16}{81}(\omega\tau)^2 + \frac{4\sqrt{2}}{81}(\omega\tau)^{5/2} + \frac{(\omega\tau)^3}{81}}$$