Additions and Corrections

Formation of an i-Motif Structure by a Self-Complementary DNA Sequence [*J. Am. Chem. Soc.* **1995**, *117*, 12637−12638]. SHANTERI SINGH AND R. V. HOSUR*

Following the publication of the above paper, Professors Maurice Gueron and Jean Louis Leroy at CNRS, 91128 Palaiseau, France, have corresponded with us about their experiments on our sequence, which they specially synthesized, as well as on other sequences. They observed that our data could be reproduced only at an added salt concentration of 0.25 M rather than the reported value of 0.1 M in our paper. They observed a systematic variation in the chemical shift of terminal C12H5 proton and no changes in other chemical shifts as the salt concentration was systematically increased. We repeated these experiments and found similar trends. This observation is indicative of end-to-end aggregation of the DNA segment. The intensities of the observed H1′−H1′ NOEs are similar to those in other DNA segments which are known to exist as duplexes under similar conditions. Thus the unusual NOEs mentioned in our paper must be interpreted as a consequence of efficient spin diffusion and not due to the formation of i-motif structure.

We thank Professors Maurice Gueron and Jean Louis Leroy for pointing out the error in salt concentration which lead us to wrong conclusions. This also has saved us the trouble of finding an explanation for the observed equivalence of strands in the spectra since the i-motif of antiparallel duplexes is inherently assymmetric.

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Model Calculations of Isotope Effects Using Structures Containing Low-Barrier Hydrogen Bonds [*J. Am. Chem. Soc.* **1996**, *118*, 1663−1668]. W. PHILLIP HUSKEY

The references listed as recent proposals of an important role for low-barrier hydrogen bonds in enzyme catalysis (refs 2−4) should have included the following additional citations which were inadvertently omitted: Gerlt, J. A.; Gassman, P. A. *J. Am. Chem. Soc.* **1992**, *114*, 5928−34. Gerlt, J. A.; Gassman, P. A. *J. Am. Chem. Soc.* **1993**, *115*, 11552−68. Gerlt, J. A.; Gassman, P. A. *Biochemistry* **1993**, *32*, 11943−52.

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Book Reviews

Biotechnology, 2nd Edition, Volume 9. Enzymes, Biomass, Food, and Feed. Edited by G. Reed and T. W. Nagodawithana. VCH Publishers: Weinheim and New York. 1995. xvi + 804 pp. ISBN 3-527-28319-6.

This large volume addresses four loosely related major themes (enzymes, biomass, and fermented food and feeds), none of which depend upon DNA manipulations, as biotechnology is sometimes defined. These themes are subdivided into 20 chapters: four chapters on various aspects of enzymology; two chapters on biomass production, value, and safety; 13 chapters on various fermented foods including not only cheese, yeast breads, beer, wine, and brandy, but vinegar, cocoa, olives, and others; and a final chapter on fermented feeds and feed products. The chapters range from a broad treatment of basic enzymology (not including molecular genetics) that would be useful as a refresher for virtually any biotechnologist, to detailed descriptions of pickling cucumbers or selecting, modifying, and managing superior yeast strains. There are inevitable redundancies: enzyme purification is covered rather extensively in two chapters, for example. Most chapters include references up through 1994 and thus seem current. The predominantly older references in the chapter on indigenous fermented foods are understandable, given the subject matter. As the editors define biotechnology for this volume, it is the application of biological principles for the purpose of converting foodstuffs into more palatable, nutritionus, or stable foods. This volume admirably serves that purpose.

Larry G. Butler, *Purdue University*

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