

Spectroscopic Characterization of Interstrand Carbinolamine Crosslinks Formed in the 5'-CpG-3' Sequence by the Acrolein-Derived γ -OH-1,N²-Propano-2'-deoxyguanosine DNA Adduct [†]

Supporting Information

Revised Manuscript

Young-Jin Cho, Hye-Young Kim, Hai Huang, Alvira Slutsky[‡], Irina G. Minko[‡], Hao Wang, Lubomir V. Nechev[¶], Ivan D. Kozekov, Alben Kozekova, Pamela Tamura, Jaison Jacob[§], Markus Voehler, Thomas M. Harris, R. Stephen Lloyd[‡], Carmelo J. Rizzo, and Michael P. Stone[†]
Contribution from the Department of Chemistry, Center in Molecular Toxicology, Vanderbilt-Ingram Cancer Center, Vanderbilt University, Nashville, Tennessee 37235

[‡]Center for Research on Environmental and Occupational Toxicology, Oregon Health and Science University, 3181 SW Sam Jackson Park Road, L606, Portland, OR 97239-3098

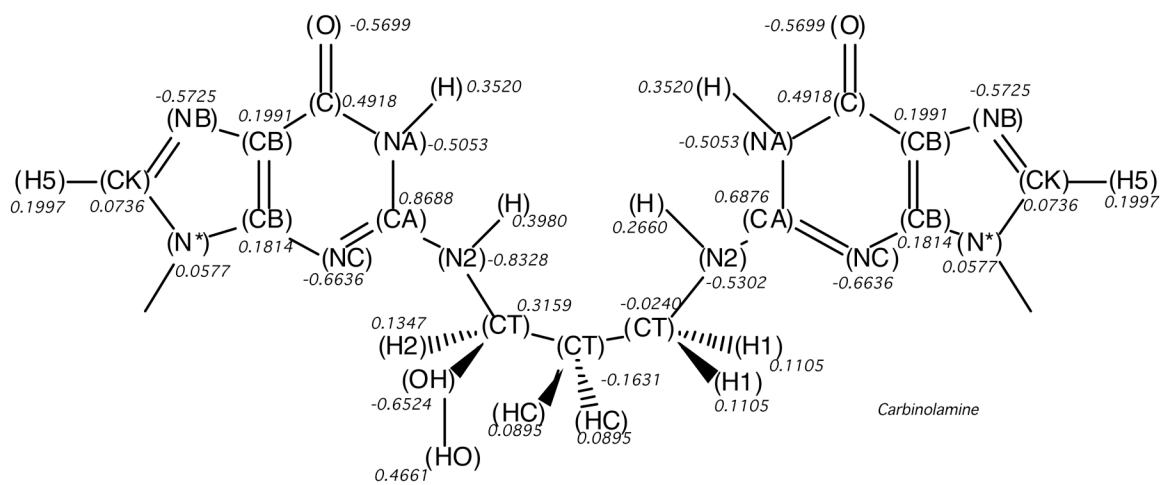
[¶]Current Address for Lubomir V. Nechev: Alnylam Pharmaceuticals, 790 Memorial Drive Suite 202, Cambridge, MA 02139.

[§]Current Address for Jaison Jacob: Wyeth Pharmaceuticals, 35 Cambridge Park Drive, Cambridge, MA 02140

Current Address for Alvira Slutsky: A.N. Bakh Institute of Biochemistry, Russian Academy of Sciences, Leninsky Pr. 33, Moscow, 117071, Russia

Running Title: Acrolein Carbinolamine DNA Crosslink

Figure S1. The parameterization of the carbinolamine crosslink, for the AMBER 8.0 forcefield.



Complete References 37 and 39.

37. Case, D.A., Darden, T.A., Cheatham, III, T.E., Simmerling, C.L., Wang, J., Duke, R.E., Luo, R., Merz, K.M., Wang, B., Pearlman, D.A., Crowley, M., Brozell, S., Tsui, V., Gohlke, H., Mongan, J., Hornak, V., Cui, G., Beroza, P., Schafmeister, C., Caldwell, J.W., Ross, W.S., and Kollman, P.A. (2004), AMBER 8.0, University of California, San Francisco.
39. Frisch, M. J.; Trucks, G. W.; Schlegel, H. B.; Scuseria, G. E.; Robb, M. A.; Cheeseman, J. R.; Zakrzewski, V. G.; Montgomery, J. A.; Stratmann, R. E.; Burant, J. C.; Dapprich, S.; Millam, J. M.; Daniels, A. D.; Kudin, K. N.; Strain, M. C.; Farkas, O.; Tomasi, J.; Barone, V.; Cossi, M.; Cammi, R.; Mennucci, B.; Pomelli, C.; Adamo, C.; Clifford, S.; Ochterski, J.; Petersson, G. A.; Ayala, P. Y.; Cui, Q.; Morokuma, K.; Malick, D. K.; Rabuck, A. D.; Raghavachari, K.; Foresman, J. B.; Cioslowski, J.; Ortiz, J. V.; Stefanov, B. B.; Liu, A.; Liashenko, A.; Piskorz, P.; Komaromi, I.; Gomperts, R.; Martin, R. L.; Fox, D. J.; Keith, T. A.; Al-Lham, M. A.; Peng, C. Y.; Nanayakkara, A.; Gonzalez, C.; Challacombe, M.; Gill, P. M. W.; Johnson, B. G.; Chen, W.; Wong, M. W.; Andres, J. L.; Head-Gordon, M.; Replogle, E. S.; Pople, J. A. GAUSSIAN 98, **1998**, Gaussian, Inc.: Pittsburgh, PA.