

studies (Muehlbacher & Poulter, 1988; Reardon & Abeles, 1986) suggest a carbocation mechanism which requires protonation of the unactivated carbon-carbon double bond as the first step in isomerization. The anatarafacial [1.3] isomerization requires functional groups capable of catalyzing a protonation-deprotonation on both faces of the hydrocarbon moiety in the substrate. The role that a thiol group might play in this mechanism is not clear and is the subject of further study in this laboratory.

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REFERENCES

- Agranoff, B. W., Eggerer, H., Henning, U., & Lynen, F. (1960) *J. Biol. Chem.* 235, 326-330.
- Anderson, M. S., Muehlbacher, M., Street, I. P., Proffitt, J., & Poulter, C. D. (1989) *J. Biol. Chem.* 264, 19169-19175.
- Banthorpe, D. V., Doonan, S., & Gutowski, J. A. (1977) *Arch. Biochem. Biophys.* 184, 381-390.
- Bruenger, E., Chayet, L., & Rilling, H. C. (1986) *Arch. Biochem. Biophys.* 248, 620-625.
- Clifford, K., Cornforth, J. W., Mallaby, R., & Phillips, G. T. (1971) *J. Chem. Soc., Chem. Commun.*, 1599-1600.
- Connolly, D. M., & Winkler, M. E. (1989) *J. Bacteriol.* 171, 3233-3246.
- Dunning, A. M., Talmud, P., & Humphries, S. E. (1988) *Nucleic Acids Res.* 16, 10393.
- Ellman, C. L. (1959) *Arch. Biochem. Biophys.* 82, 70-78.
- Farnsworth, C. C., Gelb, M. H., & Glomset, J. A. (1990) *Science* 247, 320-322.
- Feinstein, S. I., Chernajovsky, Y., Chen, L., Maroteaux, L., & Mory, Y. (1983) *Nucleic Acids Res.* 11, 2927-2941.
- Gentz, R., Langner, A., Chang, A. C. Y., Cohen, S. N., & Bujard, H. (1981) *Proc. Natl. Acad. Sci. U.S.A.* 78, 4936-4940.
- Hemsley, A., Arnheim, N., Toney, M. D., Cortopassi, G., & Galas, D. J. (1989) *Nucleic Acids Res.* 17, 6545-6551.
- Kadowaki, H., Kadowaki, T., Wondisford, F. E., & Taylor, S. I. (1989) *Gene* 76, 161-166.
- Laemmli, U. K. (1970) *Nature* 227, 680-685.
- Maniatis, T., Fritsch, E. F., & Sambrook, J. (1982) *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
- Muehlbacher, M., & Poulter, C. D. (1988) *Biochemistry* 27, 7315-7328.
- Najarian, D., Dihanich, M. E., Martin, N. C., & Hopper, A. K. (1987) *Mol. Cell. Biol.* 7, 185-191.
- Newton, C. R., Kalsheker, N., Graham, A., Powell, S., Gammack, A., Riley, J., & Markham, A. F. (1988) *Nucleic Acids Res.* 16, 8233-8243.
- Olins, P. O., Devine, C. S., Ranwala, S. H., & Kavka, K. (1988) *Gene* 73, 227-235.
- Poulter, C. D., & Rilling, H. C. (1981) *Biosynthesis of Isoprenoid Compounds* (Porter, J. W., & Spurgeon, S. L., Eds.) Vol. 1, pp 162-209, John Wiley & Sons, New York.
- Reardon, J. E., & Abeles, R. H. (1985) *J. Am. Chem. Soc.* 107, 4078-4079.
- Reardon, J. E., & Abeles, R. H. (1986) *Biochemistry* 25, 5609-5616.
- Rilling, H. C., Breunger, E., Epstein, W. W., & Crain, P. F. (1990) *Science* 247, 318-320.
- Russo, A., & Bump, E. A. (1988) *Methods Biochem. Anal.* 33, 165-241.
- Sanger, F., Nicklen, S., & Coulson, A. R. (1977) *Proc. Natl. Acad. Sci. U.S.A.* 74, 5463-5467.
- Satterwhite, D. M. (1985) *Methods Enzymol.* 110, 92-99.
- Schafer, W. R., Kim, R., Sterne, R., Thorner, J., Kim, S.-H., & Rine, J. (1989) *Science* 245, 379-385.
- Scopes, R. (1982) *Protein Purification Principles and Practice*, p 266, Springer-Verlag, Berlin.
- Shah, D. H., Cleland, W. W., & Porter, J. W. (1965) *J. Biol. Chem.* 240, 1946-1951.
- Sheares, B. T., White, S. S., Molowa, D. T., Chan, K., Ding, V. D.-H., Kroon, P. A., Bostedor, R. G., & Karkas, J. D. (1989) *Biochemistry* 28, 8129-8135.
- Spurgeon, S. L., & Porter, J. W. (1981) *Biosynthesis of Isoprenoid Compounds*, Vol. 1, pp 1-46, Wiley, New York.
- Stone, K. J., Roeske, W. R., Clayton, R. B., & Van Tamelen, E. E. (1969) *J. Chem. Soc., Chem. Commun.*, 530-532.
- Tindall, K. R., & Kunkel, T. A. (1988) *Biochemistry* 27, 6008-6013.
- Yanisch-Perron, C., Vieira, J., & Messing, J. (1985) *Gene* 33, 103-109.

CORRECTION

Slow Binding Inhibition of 3-Hydroxy-3-methylglutaryl-Coenzyme A Reductase, by Pearl Louis-Flamberg, Catherine E. Peishoff, Deborah L. Bryan, Jack Leber, John D. Elliott, Brian W. Metcalf, and Ruth J. Mayer*, Volume 29, Number 17, May 1, 1990, pages 4115-4120.

Page 4118. In Table II, part B, k_{on} for compound 1 should read 16 (0.3).