CORRECTION

Cloning of Rat Aorta Lysyl Oxidase cDNA: Complete Codons and Predicted Amino Acid Sequence[†], by Philip C. Trackman,* Ann Marie Pratt, Andrzej Wolanski, Shiow-Shih Tang, Gwynneth D. Offner, Robert F. Troxler, and Herbert M. Kagan*, Volume 29, Number 20, May 22, 1990, pages 4863–4870.

We report a correction of our cDNA sequence for rat aorta lysyl oxidase. The revised sequence contains six additional nucleotides in the predicted precursor molecule resulting in two localized frame shifts and corresponding changes in the predicted amino acid sequence (Figure 1). These errors were due to band compressions in GC-rich regions which were either only partially resolved by the use of 7-deaza-dGTP and T7 DNA polymerase (nucleotide 223; nucleotides 409-410) or not apparent when Klenow DNA polymerase was used (nucleotide 483; nucleotides 559-560). The compressions have now been resolved by using T7 DNA polymerase and reaction mixtures containing 7-deaza-dITP (nucleotides 409-410) or reaction mixtures containing 7-deaza-dGTP (nucleotides 223, 483, 559-560) [Barr, P. J., Thayer, R. M., Laybourn, P., Najarian, R. C., Seela, F., & Tolan, D. R. (1986) BioTechniques 4, 428-432; Mills, D. R., & Kramer, F. R. (1979) Proc. Natl. Acad. Sci. U.S.A. 76, 2232-2235] and new sequencespecific oligodeoxynucleotide primers. The sequence-specific sense primers used were CAGTACCAGCCTCAGCGA and AGCTCAGTAATCTGAGGCC, and the sequence-specific antisense primer was GGCCTCAGATTACTGAGCT. The revised cDNA sequence results in the predicted molecular weight of 46 573 (411 amino acids), compared to 45 979 (409 amino acids) previously reported, and now contains two predicted N-glycosylation sites instead of one (Asn 138 and 91 in Figure 1). The second of two predicted Arg-Arg-Arg sequences postulated as potential proteolytic processing sites is now predicted to be Arg-Arg (residues 134 and 135, Figure 1), and the previously predicted Cys-Cys-Cys sequence is now Leu-Leu (residues 86-88, Figure 1). It is of considerable interest that the predicted amino acid sequence of rat aorta lysyl oxidase is 96.4% homologous to that of mouse rrg cDNA, the increased expression of which accompanies reversion of NIH 3T3 cells transformed by LRT-c-H-ras [Contente, S., Kenyon, K., Rimoldi, D., & Friedman, R. M. (1990) Science 249, 796-798; Kenyon, K., Contente, S., Trackman, P. C., Tang, J., Kagan, H. M., & Friedman, R. M. (1991) Science (in press)].

FIGURE 1: Corrected partial cDNA sequence and deduced amino acid sequence of rat aorta lysyl oxidase. Only nucleotides 1-630 are shown. Underlined amino acids differ from the previously published sequence; plus signs indicate nucleotides not included in the original cDNA sequence.

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