Corrections

Active Site Mutants of Pig Citrate Synthase: Effects of Mutations on the Enzyme Catalytic and Structural Properties, by Claudia T. Evans, Linda C. Kurz, S. James Remington, and Paul A. Srere*, Volume 35, Number 33, August 20, 1996, pages 10661−10672.

We previously reported (Evans *et al*., 1996) mutations of citrate synthase at a "hinge residue" Gly275, whose backbone conformational angles change by more than 90° upon the open−closed transition of the enzyme. The mutations (Gly275Ala and Gly275Val) were designed to interfere sterically with one or the other of the two conformations. The measured activities of the mutant enzymes were considerably lower than that of wild-type enzyme (indeed by a factor of nearly 10 000 for the Val mutant), strongly supporting the notion that conformational change is an essential aspect of the catalytic mechanism.

However, in Table 2, the nucleotide sequences for the Gly275Ala and the Gly275Val actually show the presence of a second mutation, that of His274Leu. If these oligonucleotides were actually used for the preparation of the presumed single mutants, then the data in Tables 3 and 4 for Gly275Ala and Gly275Val would be for double mutants. The second mutation, His274Leu, presumably causing an inactivation of the enzyme and the discussion based on single mutations would have been incorrect.

We, therefore, have repeated (by Dr. Konstantin Shatalin) the entire construction of the mutant enzymes Gly275Ala and Gly275Val and also a double mutant, His274Leu/Gly275Ala. This latter mutant has 1000th the activity of the single mutant, Gly275Ala. The single mutants, Gly275Val and Gly275Ala, showed the same activities as reported in the paper. Therefore, the results in Tables 3 and 4 are correct, and the Discussion that follows is correct.

The only error in the paper is that of the oligonucleotides in Table 2 for Gly275Ala and Gly275Val, in which mutations of His274Leu shown are incorrect. However, the data in Tables 3 and 4 and the Discussion which follows are valid.

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