

Corrections

Identification of the Zinc Ligands in Cobalamin-Independent Methionine Synthase (MetE) from *Escherichia coli*, by Zhaohui S. Zhou, Katrina Peariso, James E. Penner-Hahn, and Rowena G. Matthews*, Volume 38, Number 48, November 30, 1999, pp 15915–15926.

Page 15918. A typographical error in the paper by J. B. Hunt et al. [(1985) *Anal. Biochem.* 146, 150–157] led us to misinterpret the published value of K_A for formation of $\text{Zn} \cdot (\text{PAR})_2$ complexes at pH 7.0. That value should be $2.2 \times 10^{12} \text{ M}^{-2}$.

Equations 2 and 4 should read as follows:

$$K_{a(\text{PAR})} = [\text{Zn}(\text{PAR})_2]/([\text{Zn}_{\text{free}}][\text{PAR}_{\text{free}}]^2) \quad (2)$$

$$K_a(\text{MetE}) = (K_{a(\text{PAR})}[\text{Zn-MetE}][\text{PAR}_{\text{free}}]^2)/([\text{Zn}(\text{PAR})_2][\text{MetE}_{\text{apo}}]) \quad (4)$$

Page 15920. The revised values for the zinc association constants, calculated using these equations, are listed in Table 2.

Table 2: Zinc Content, Zinc Association Constants (K_a), and Specific Activities for the MetE Proteins

	Zn per mole of protein ^a	K_a of Zn with MetE (M^{-1})	specific activity ($\mu\text{mol min}^{-1} \text{mg}^{-1}$)
wild-type	1.0	$> 10^{12}$	0.27
His641Gln	0.3–0.4	1.3×10^{10}	0.0004
Cys634Ser	0.8–0.9	5.7×10^9	not detectable ^b
Cys726Ser	0.4–0.7	1.4×10^{10}	0.0007

Because PAR cannot extract zinc from the wild-type enzyme in the absence of added mercurials, we conservatively estimate that its K_A is greater than the K_A for formation of $\text{Zn} \cdot \text{PAR}_2$ complexes at pH 7.0.

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