BIOCHEMISTRY
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Addition and Correction

Correction to Redox Potential and Peroxide Reactivity of Human Peroxiredoxin 3 [Biochemistry (2009) *Biochemistry 48,* 6495].

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Results from recent experiments in our laboratory have made us aware that redox equilibrium was not achieved under the conditions used in Figure 6 to determine the redox potential of peroxiredoxin 3. The proportions of reduced and oxidized peroxiredoxin 3, in the critical range, were influenced more by the availability of reduced dithiothreitol and the kinetics of reduction than thermodynamic equilibrium between the two redox couples. Consequently, the redox potential of peroxiredoxin 3 cannot be calculated from the data in Figure 6, but we can conclude that it will be higher than −290 mV. Our subsequent attempts to establish appropriate conditions for measuring peroxiredoxin redox potentials have not been successful. One possible explanation for the difficulty in achieving equilibrium is that oxidized dithiothreitol has been observed to bind to the peroxiredoxin active site (*1*). Redox potentials for other peroxiredoxins have been obtained using the same methodology and may be subject to similar limitations.

REFERENCES

1. Hall, A., Parsonage, D., Poole, L. B., and Karplus, P. A. (2010) Structural evidence that peroxiredoxin catalytic power is based on transition-state stabilization. *J. Mol. Biol. 402*, 194–209.

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