

Corrections

Conformationally Specific Misfolding of an Integral Membrane Protein, by Kirill Oxenoid, Frank D. Sönnichsen, and Charles R. Sanders, Volume 40, Number 17, May 1, 2001, pages 5111–5118.

New data indicate that the data presented in this paper were not correctly interpreted and that the primary conclusion of this paper is incorrect. We have now purified the protein identified in this paper as a misfolded form of an ultrastable mutant of diacylglycerol kinase (DAGK). The SDS–PAGE band and TROSY NMR spectrum of the purified protein match those presented in the original work and there identified as arising from misfolded DAGK. With the kind assistance of Prof. David Friedman and Dr. Jeremy Norris of Vanderbilt University (Nashville, TN), this protein was subjected to mass spectroscopy to obtain a molecular mass and partial sequence which indicate that the protein formerly thought to be misfolded DAGK is identical or very similar to the mature form of the *Escherichia coli* YodA protein (1). It has previously been shown that the mature form of YodA has a native N-terminal sequence of HGHSH which allows it to be purified using Ni(II)-based metal ion affinity chromatography (2). This explains why it copurifies with polyHis-tagged DAGK. Moreover, it has been shown that YodA is a stress response protein whose expression can be dramatically upregulated by the overexpression of other proteins or by variations in cell culture conditions (1). We speculate that batch-to-batch variations in the degree of YodA coexpression with the ultrastable mutant form of DAGK may reflect minor differences in cell culture media (such as using different sources of water or vitamins) or in the degree of aeration during cell growth. We regret our error of interpretation. We note that this correction in no way impacts results and interpretations which have subsequently been reported in this and other journals regarding the folding and misfolding of wild-type and mutant forms of diacylglycerol kinase. We also note that the set of TROSY NMR peaks identified in the original work as arising from correctly folded DAGK is indeed from DAGK.

1. David, G., Blondeau, K., Shiltz, M., Penel, S., and Lewit-Bentley, A. (2003) YodA from *Escherichia coli* is a metal binding, lipocalin-like protein. *J. Biol. Chem.* 278, 43728–43735.
2. David, G., Blondeau, K., Renouard, M., and Lewit-Bentley, A. (2002) Crystallization and preliminary analysis of *Escherichia coli* YodA. *Acta Crystallogr. D* 58, 1243–1245.

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