

HHS Public Access

Author manuscript

Nature. Author manuscript; available in PMC 2021 June 07.

Published in final edited form as:

Nature. 2021 May; 593(7860): 612. doi:10.1038/s41586-021-03527-x.

Retraction Note: Endoperoxide formation by an α -ketoglutarate-dependent mononuclear non-haem iron enzyme

Wupeng Yan, Heng Song, Fuhang Song, Yisong Guo, Cheng-Hsuan Wu, Ampon Sae Her, Yi Pu, Shu Wang, Nathchar Naowarojna, Andrew Weitz, Michael P. Hendrich, Catherine E. Costello, Lixin Zhang, Pinghua Liu, Yan Jessie Zhang

Nature is retracting this Article because after extensive consultation with peer reviewers, it has come to our attention that the data contained within do not support its central conclusions about the mechanism of fumitremorgin B endoperoxidase (FtmOx1) and the central role of Tyr224 in catalysis. Further expert review of the crystal structure 4ZON, which was alleged to show fumitremorgin B bound to FtmOx1 (Fig. 2f of the original Article), noted that the substrate density can also be assigned to bound MES buffer and a cluster of water molecules. We have notified the Protein Data Bank about entry 4ZON. The catalytically competent binding mode of fumitremorgin B therefore remains undefined. Biochemical data on Tyr224 mutants do not conclusively support either the assignment of the observed transient radical to Tyr224 or its mechanistic role in catalysis. Author Yan Jessie Zhang has agreed with the Retraction of this Article, whereas the other authors stand by their data and disagree with this Retraction.