

Electronic Supplementary Material (ESI)

Mechanism Insight into the High-efficiency Catalytic Killing of *E. coli* by Metal-phenolic Network as a Nanozyme

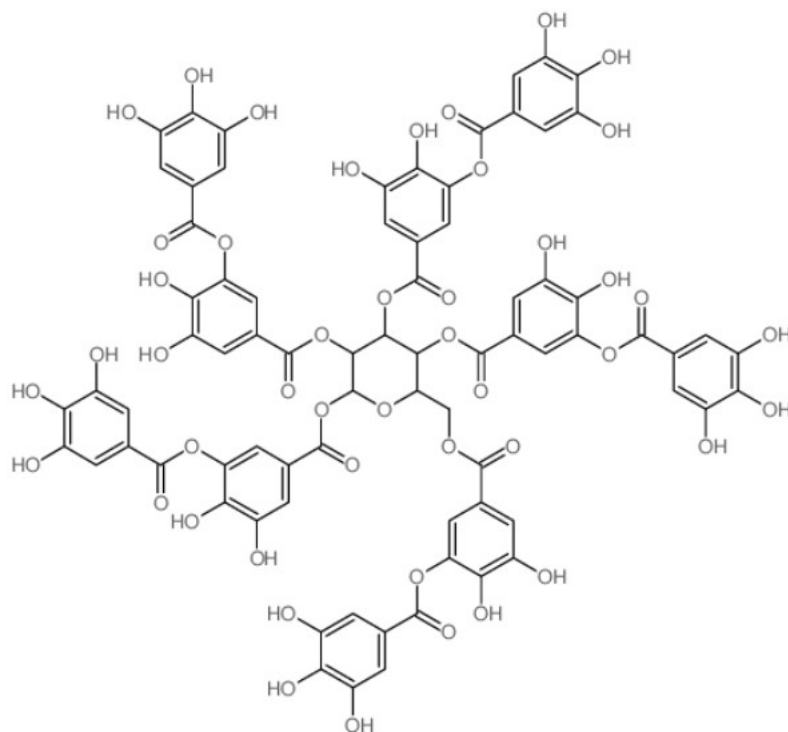
Weiyun Guo^{a, b, c*}, Chaoyun Wu^{a, b}, Guanghui Li^a, Yonghui Wang^a, Shenghua He^a, Jihong Huang^{a, c}, Xueli Gao^a, Xiaoyue Yue^b

^a Food and Pharmacy College, Xuchang University, Xuchang 461000, China;

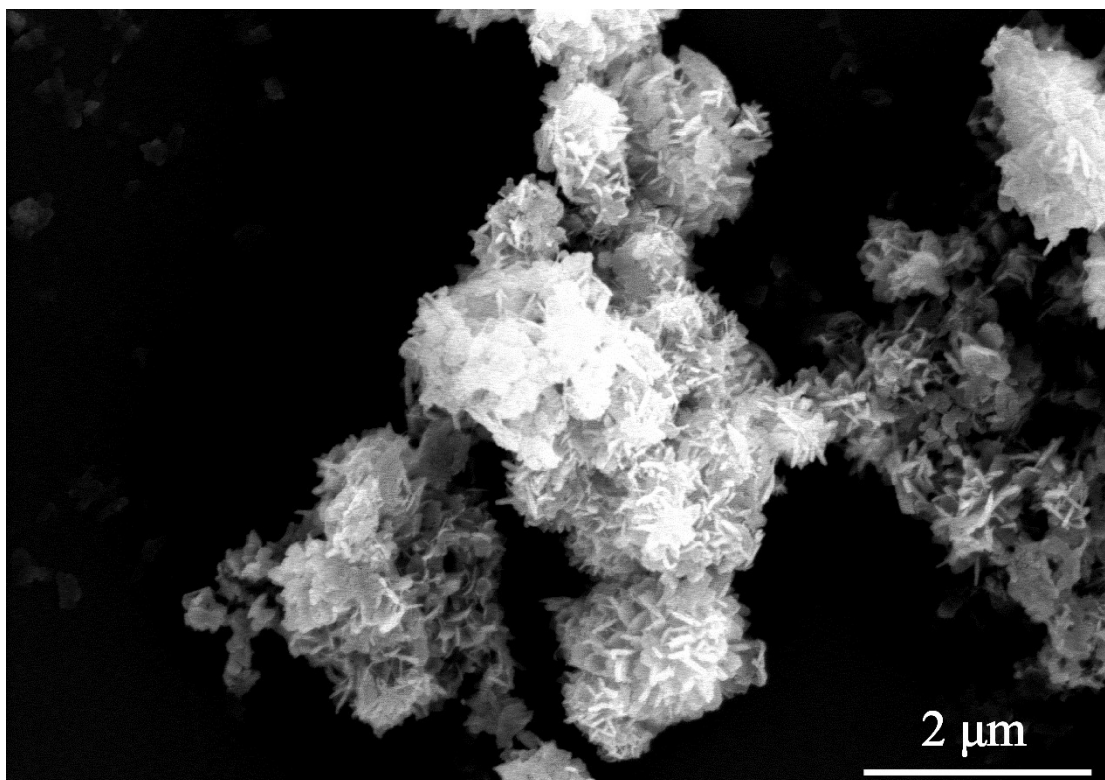
^b College of Food and Bioengineering, Zhengzhou University of Light Industry, Zhengzhou 450001, China;

^c Food Laboratory of Zhongyuan. Luohe 462000, China;

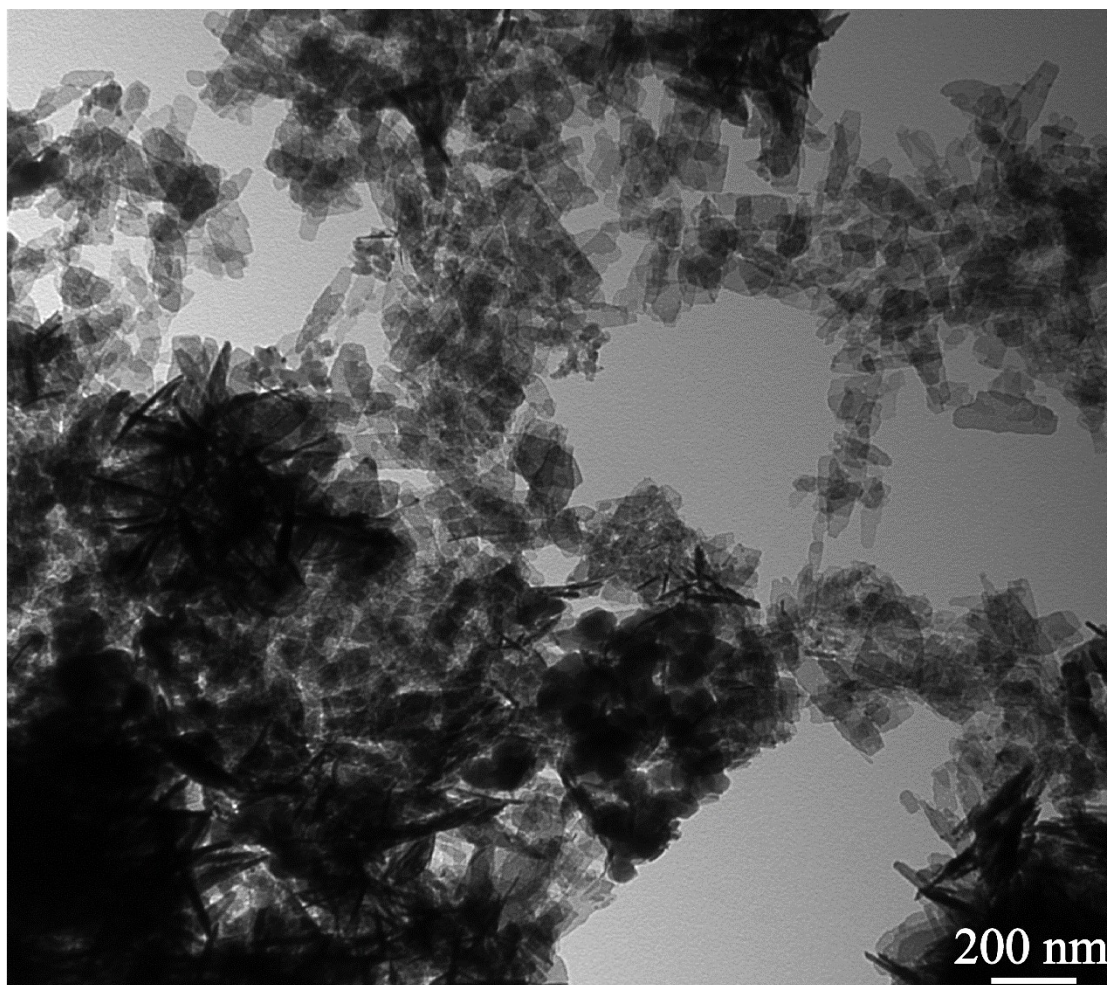
1.1 Supplementary Figures



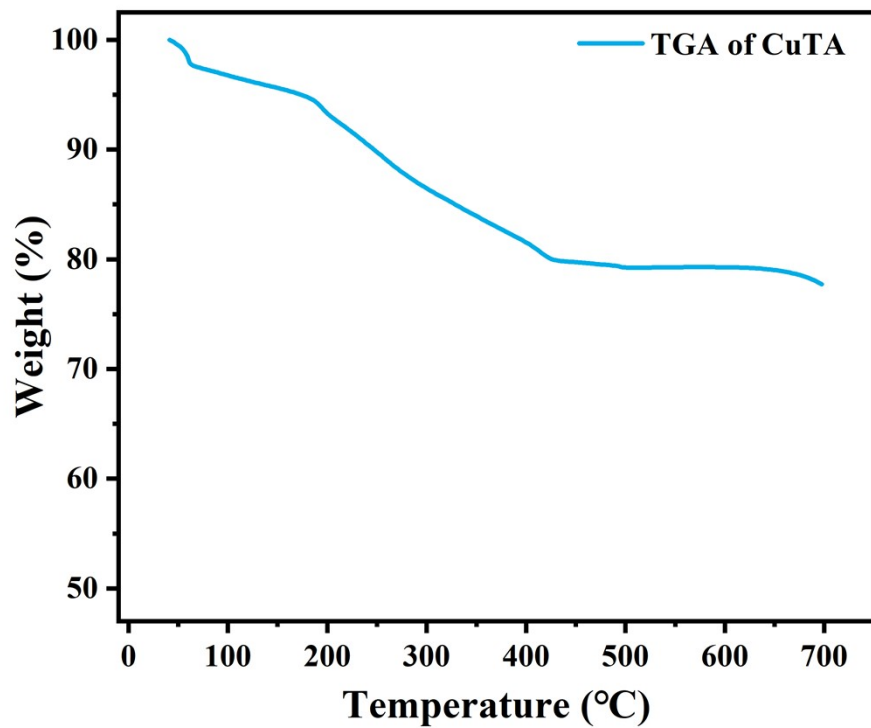
Supplementary Figure 1. The structure of the Tannic acid.



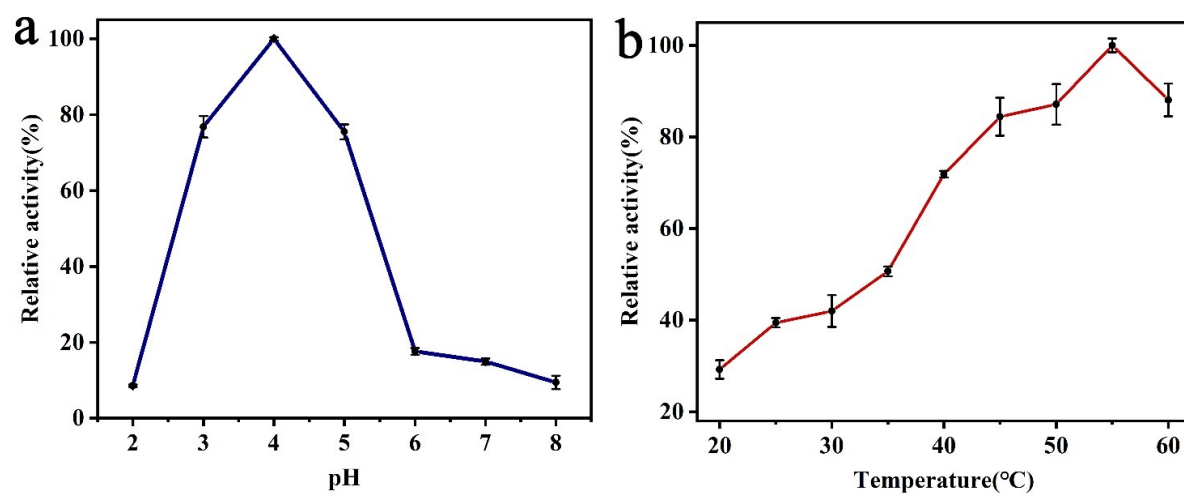
Supplementary Figure 2. SEM image of CuTA nanozyme.



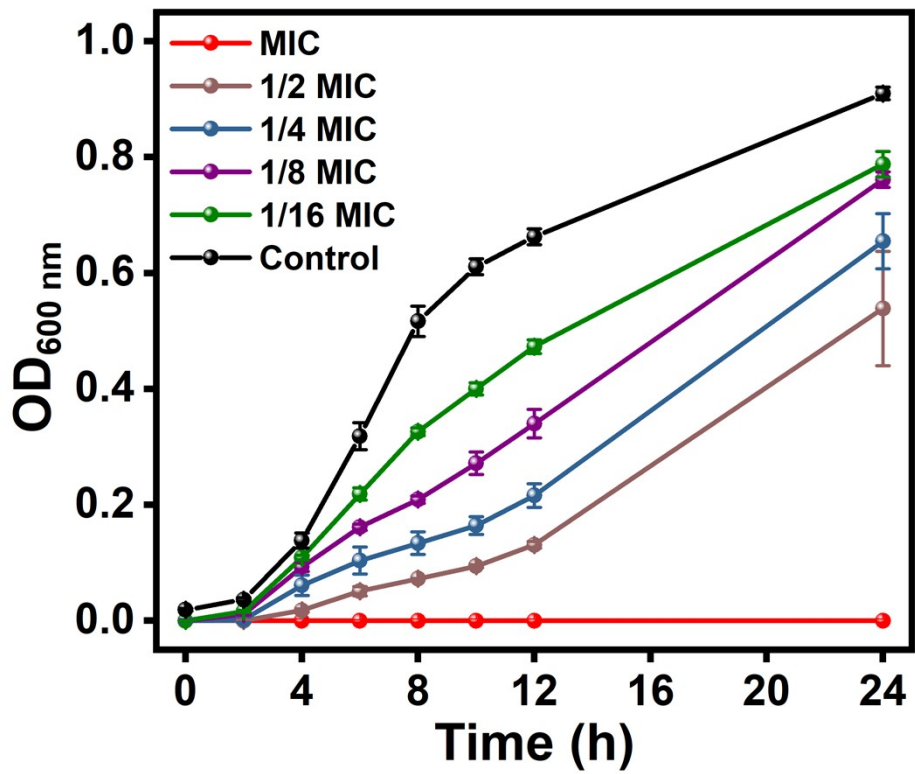
Supplementary Figure 3. TEM image of CuTA nanozyme.



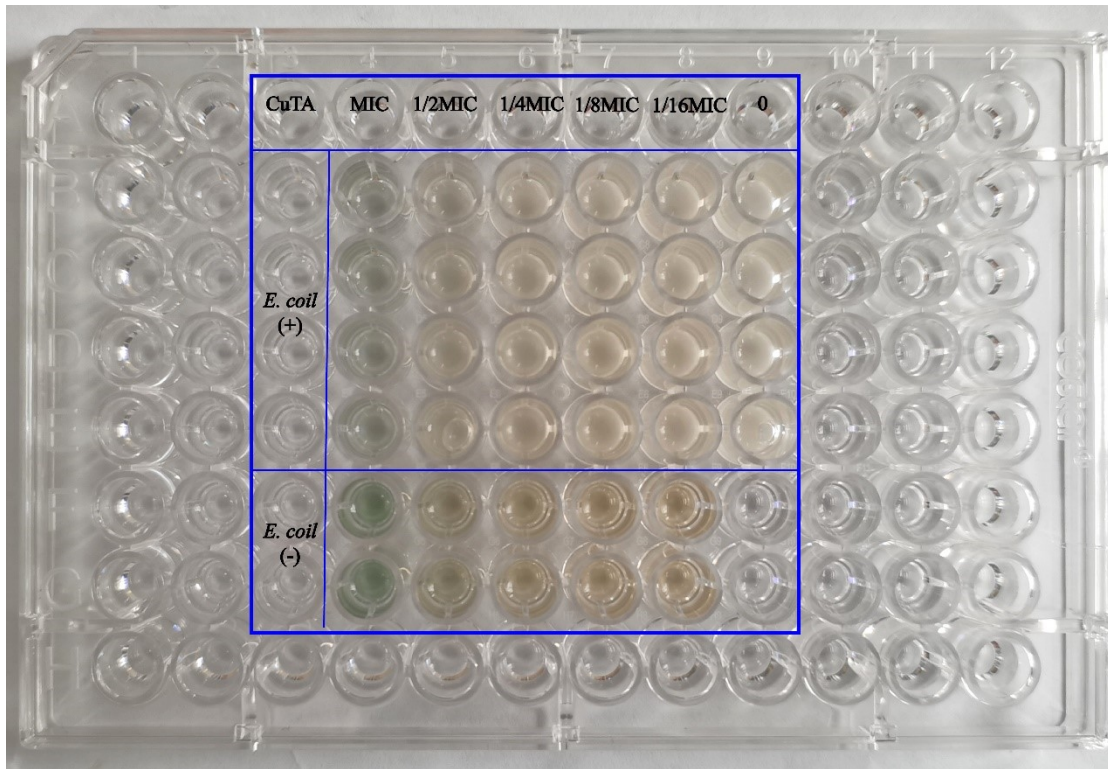
Supplementary Figure 4. TGA analysis of CuTA.



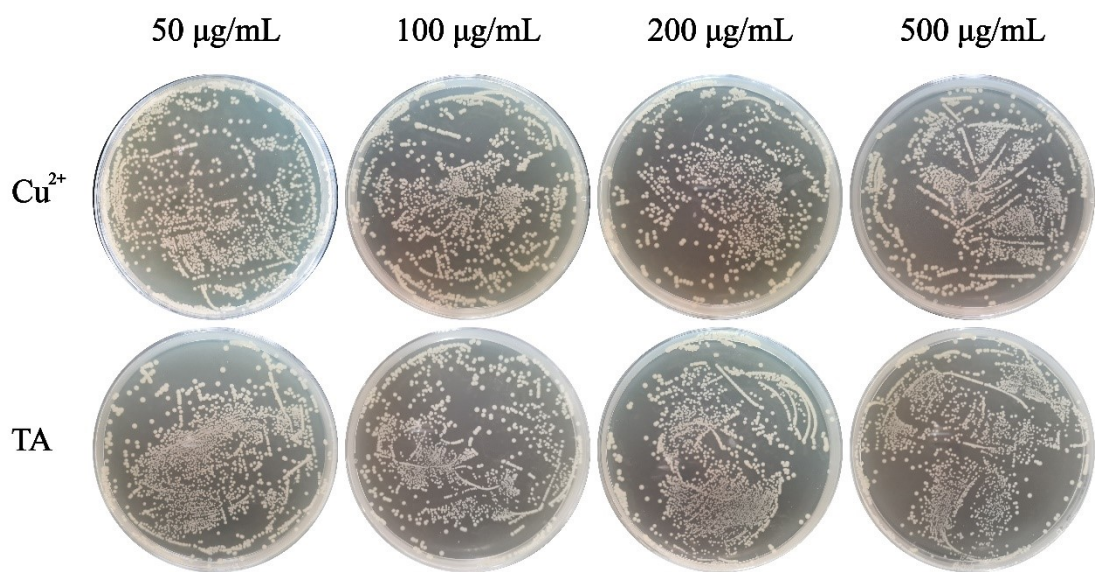
Supplementary Figure 5. (a) pH and (b) temperature optimization of the catalytic activity of CuTA peroxidases



Supplementary Figure 6. Growth curve analysis of *E. coli* with or without the presence of various CuTA concentrations.



Supplementary Figure 7. The images show MIC measurement results.



Supplementary Figure 8. Photographs of *E. coli* plates after treatment with different concentrations of Cu^{2+} and TA alone.

Table S1. The anti-bacteria of different forms of MPN-based materials

Phenolic ligands	Metal ion	Bacteria	Ref
TA	Zn ²⁺	<i>E. coli</i>	1
TA	Fe ³⁺	<i>S. aureus</i>	2
GA	Cu ²⁺	<i>S. aureus, E. coli</i>	3
EGCG	Mg ²⁺	<i>S. aureus, E. coli</i>	4
PA	Fe ³⁺	<i>S. aureus, E. coli, MRSA</i>	5
TA	Cu ²⁺	<i>E. coli</i>	This Work

References

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