

Literature Report

Reporter: Liu Weiwei

Date: 2020-06-11

Visualization and *in-situ* ablation of intracellular bacterial pathogen through metabolic labeling

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Angew. Chem. Int. Ed. 2020 , 59 , 9288



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Education

- PhD (Chem) National University of Singapore, 2001
- MSc & BSc (Chem) Nanjing University, 1998&1995

Research Interests

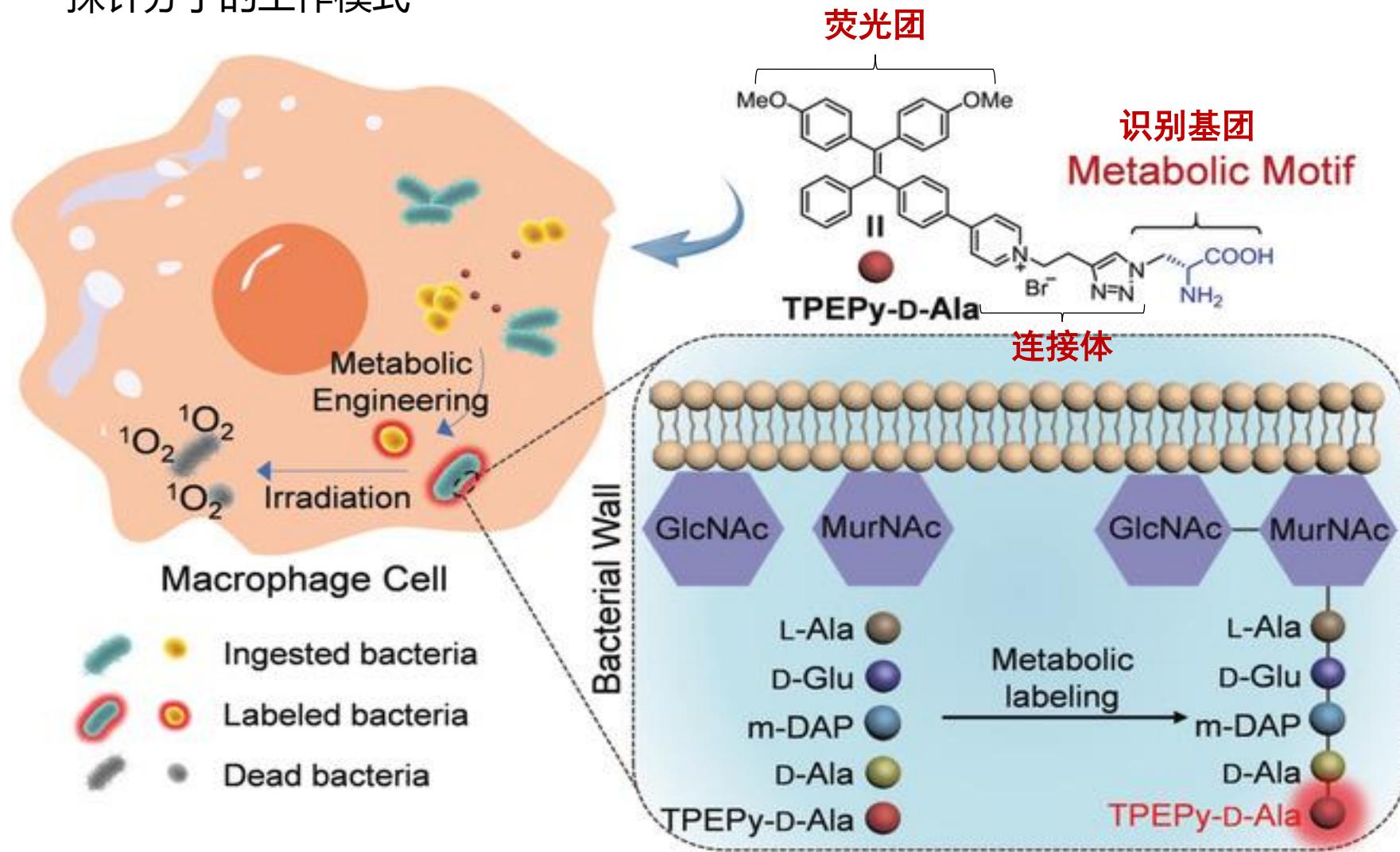
- Luminescent materials (conjugated polymers and oligomers)
- Organic nanomaterials
- Sensing and Imaging
- Solar Cells



Design



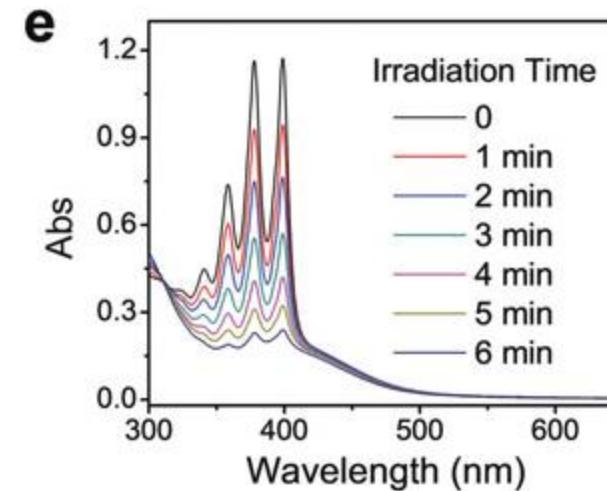
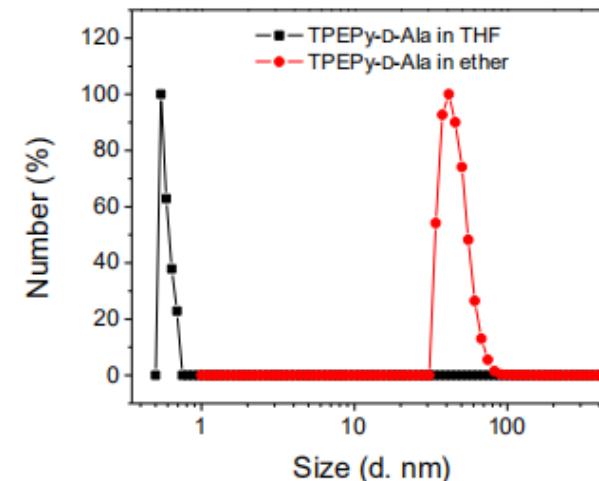
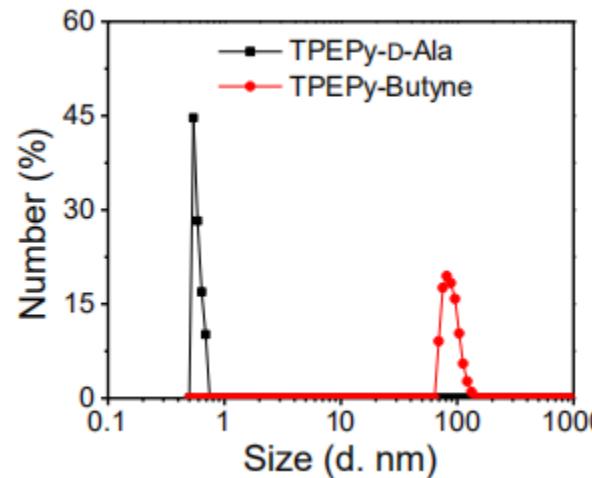
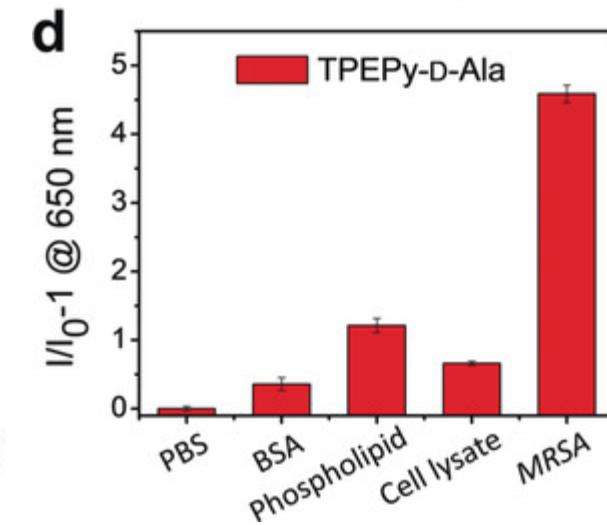
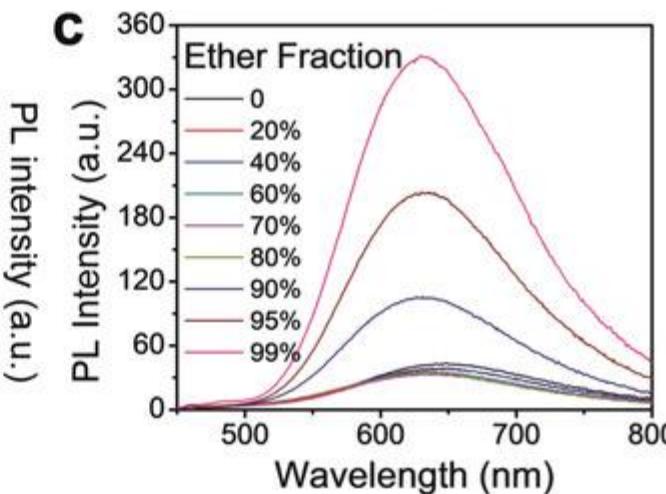
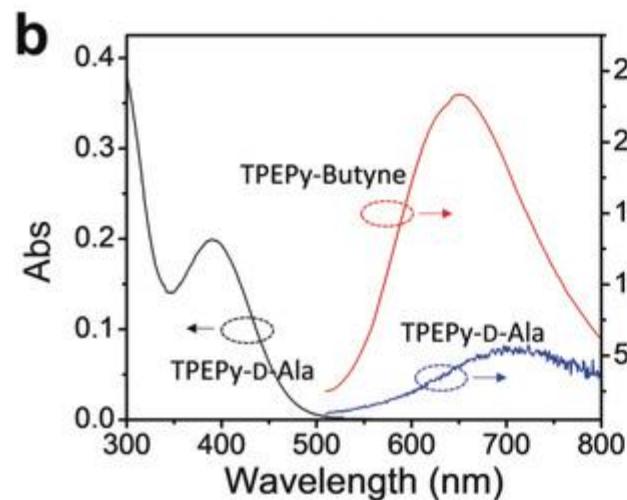
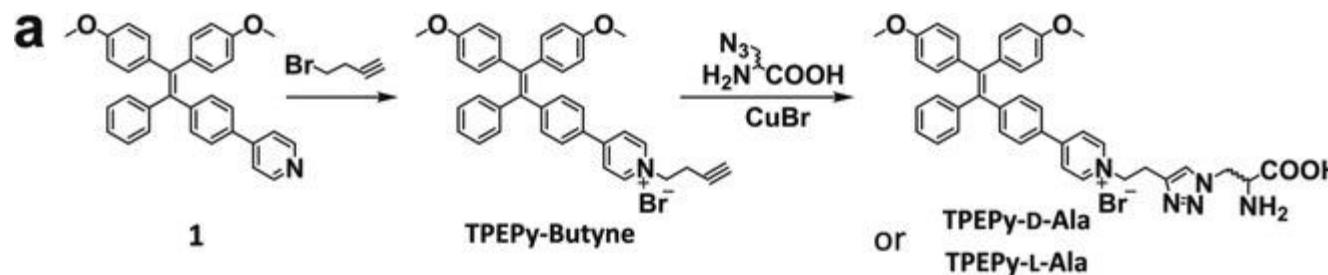
探针分子的工作模式



Scheme 1. D-alanine is involved in the metabolism of peptidoglycan, which permits the metabolic labeling of bacterial peptidoglycan by TPEPy-D-Ala.



Result and Discussion





Result and Discussion

细菌成像实验

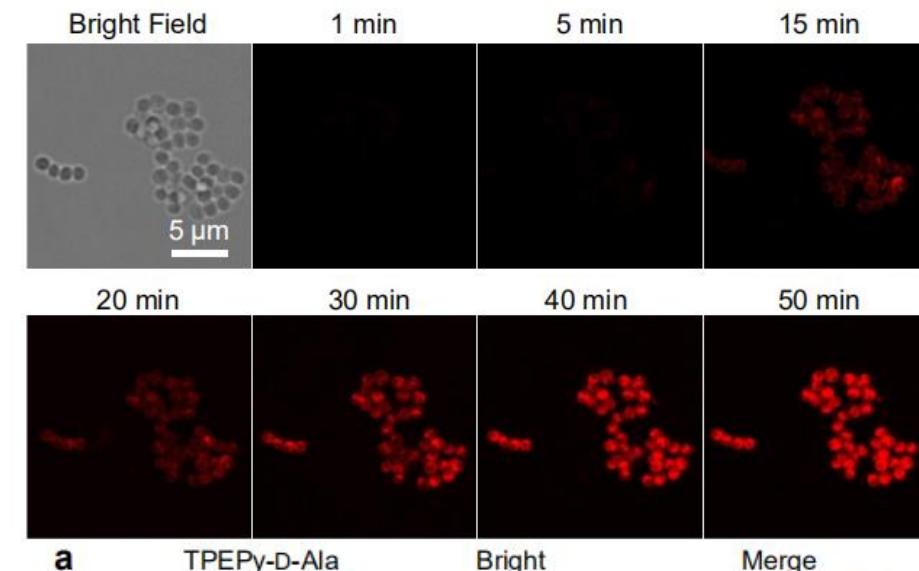
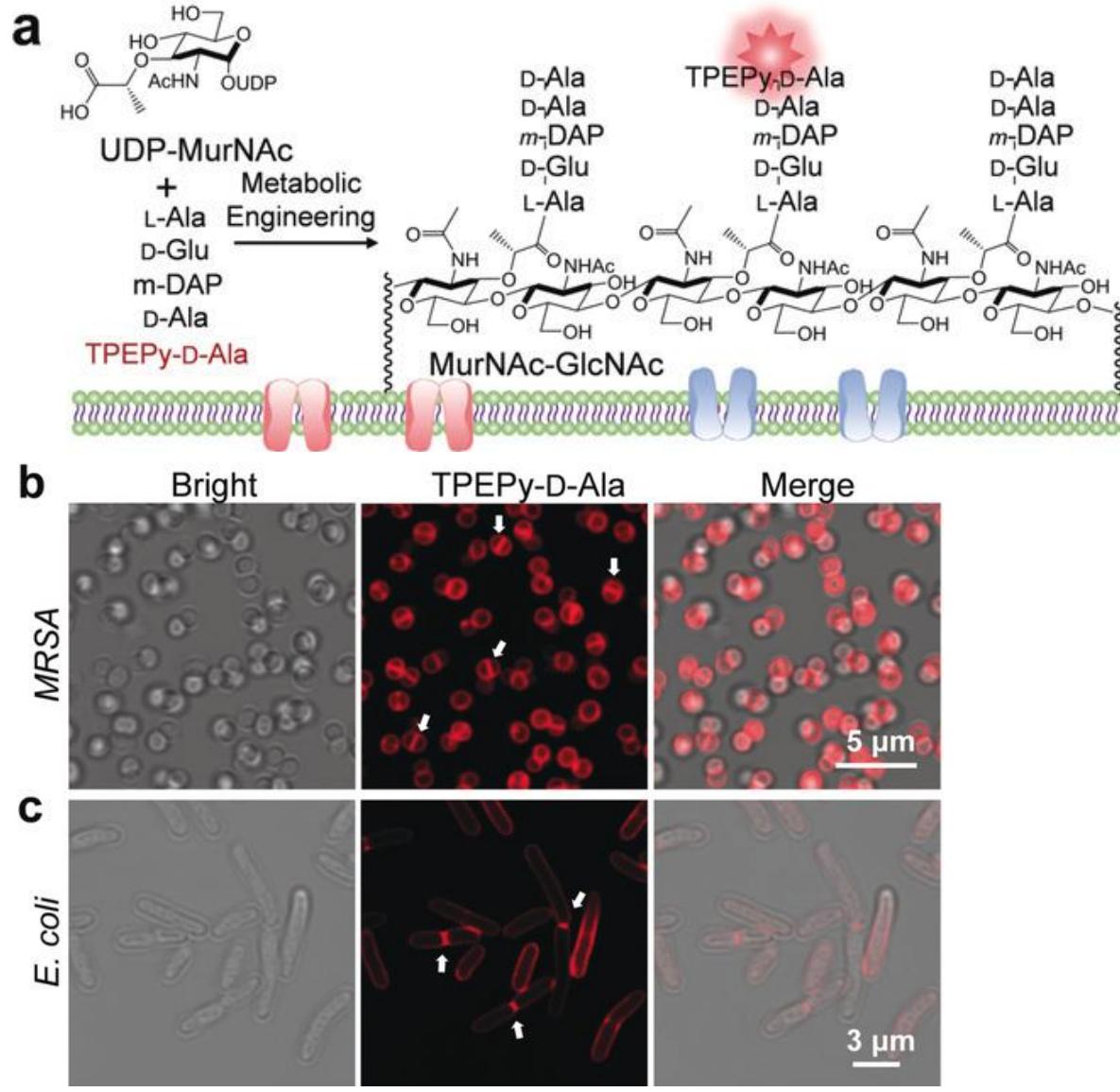


Fig. S8

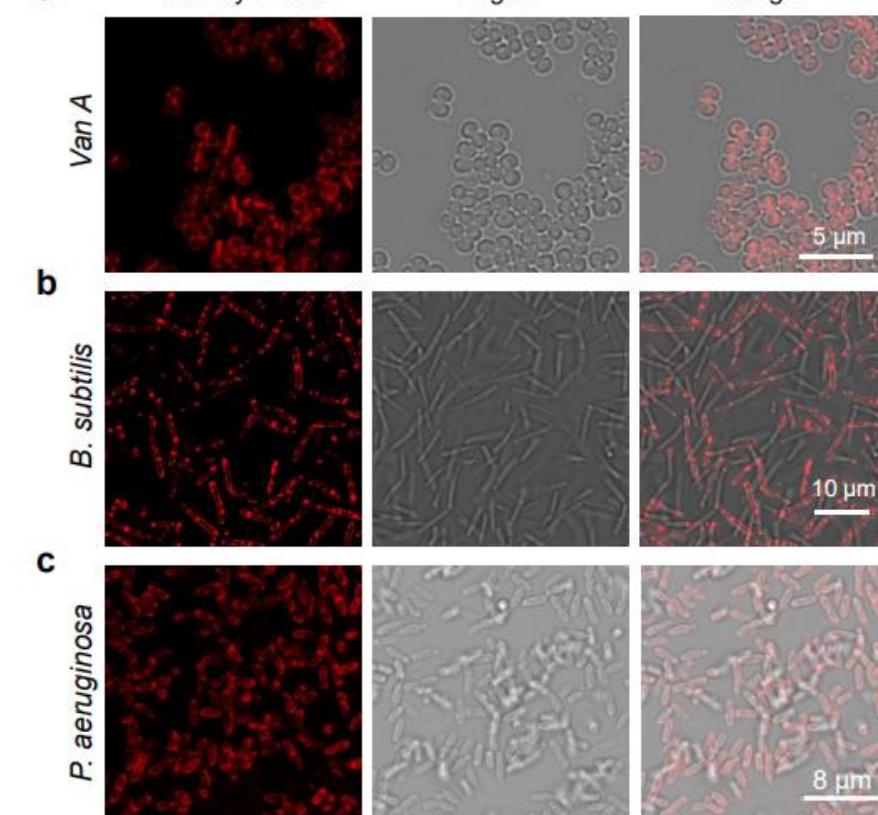


Fig. S9

Result and Discussion

TPEPy-L-Ala对照实验

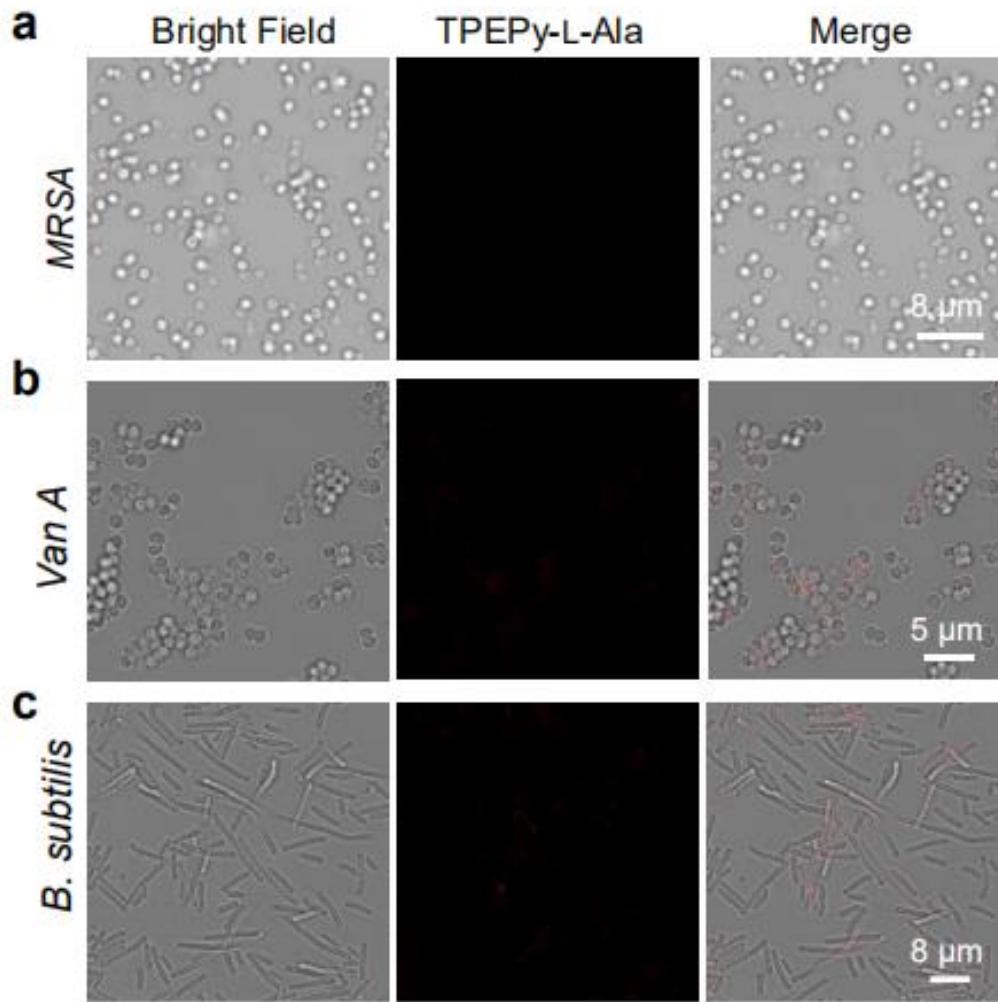
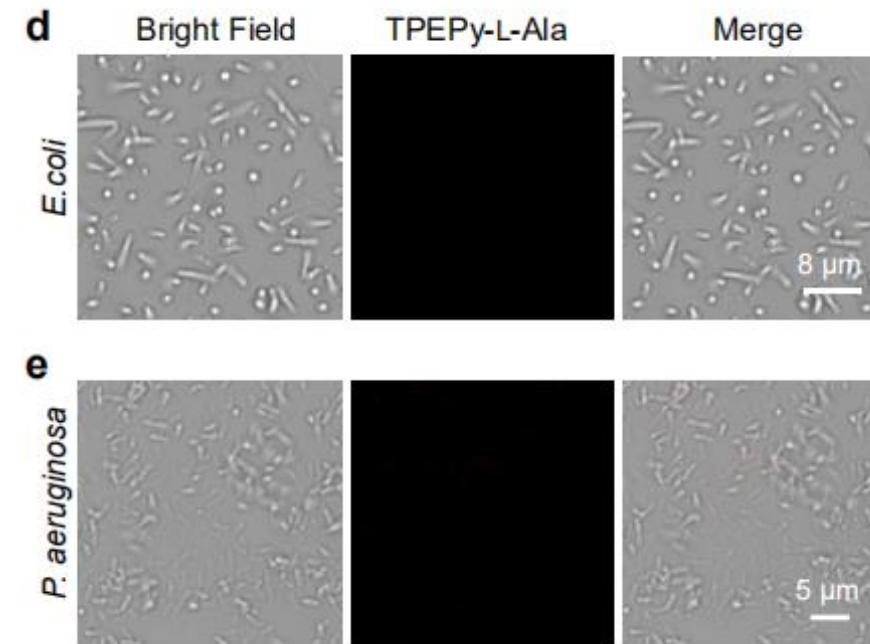


Fig. S10



Az-D-Ala竞争实验

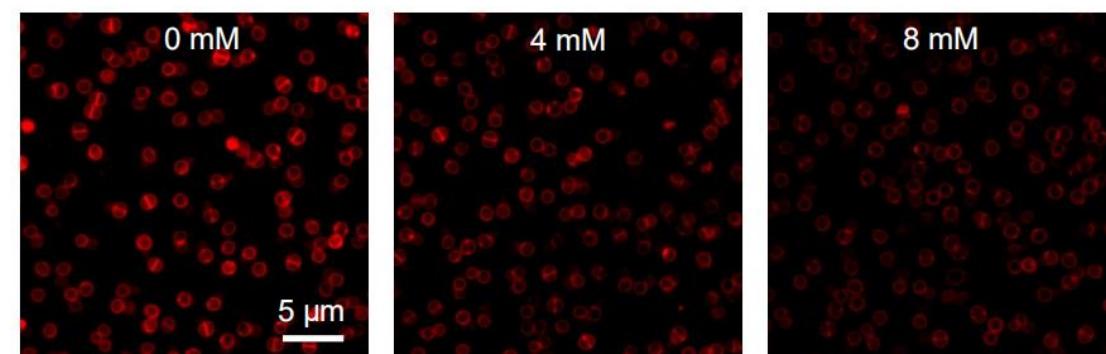


Fig. S12

Result and Discussion

巨噬细胞成像实验

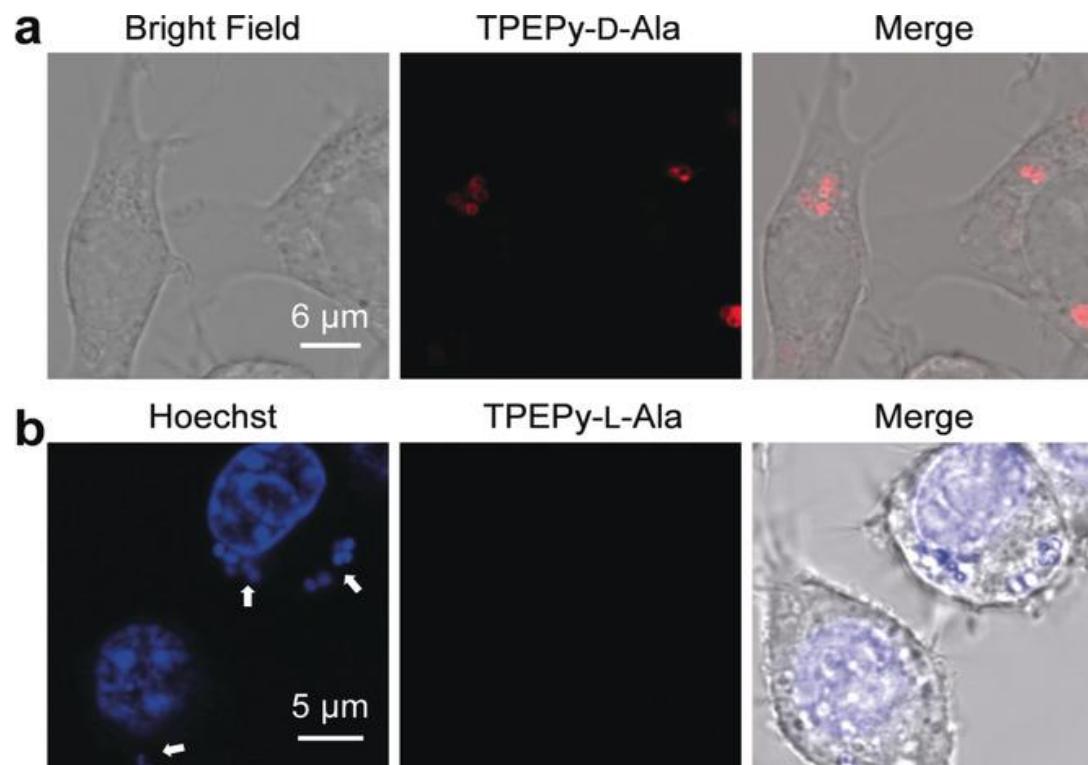


Figure 3. Bright field, CLSM and merged images of MRSA-infected RAW 264.7 cells treated with TPEPy-D-Ala (a) or TPEPy-L-Ala together with Hoechst 33342 (b)

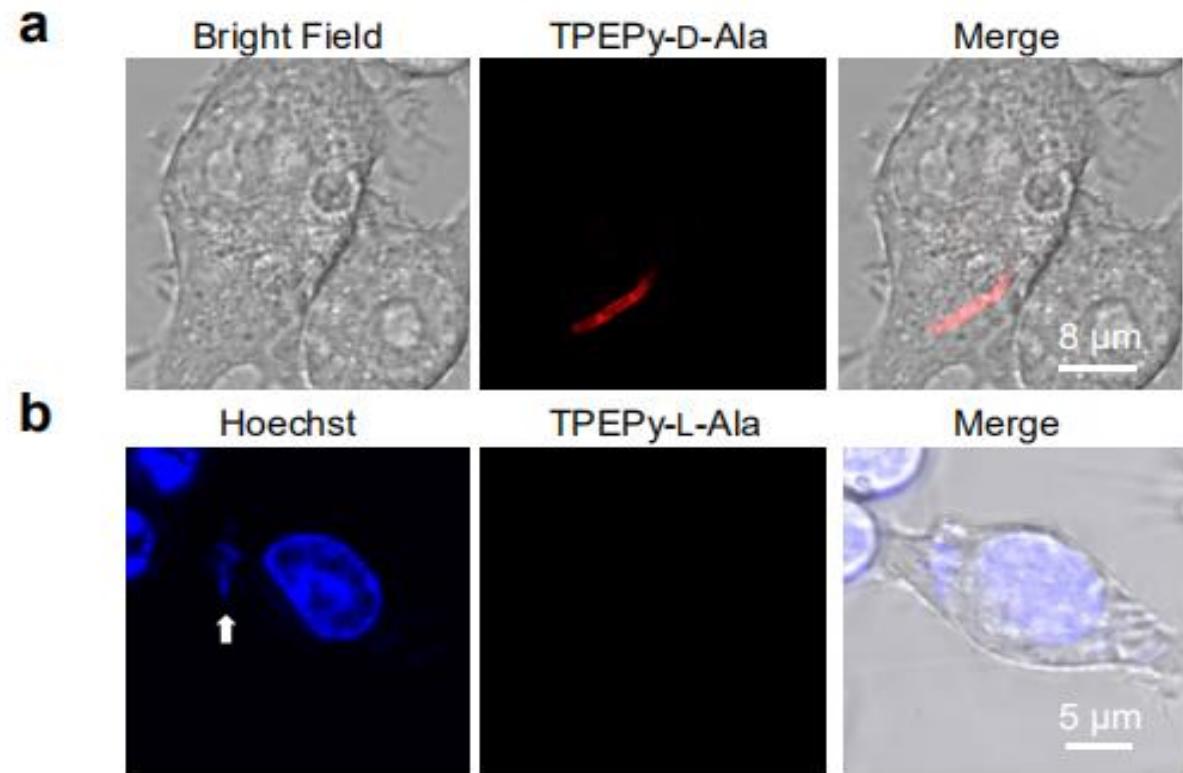


Fig. S19

Result and Discussion

细胞外光动力杀菌

光动力活性评估

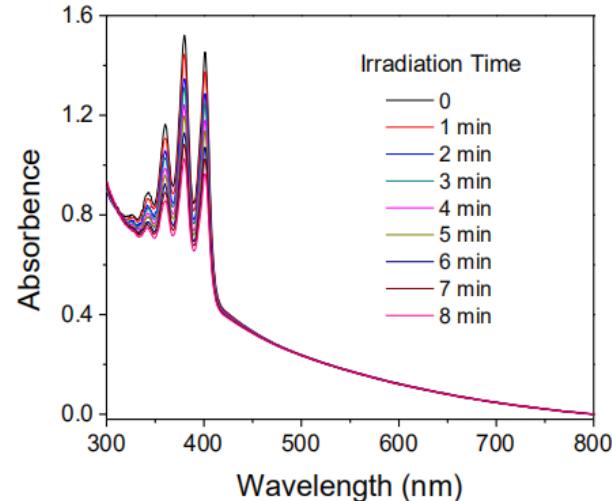
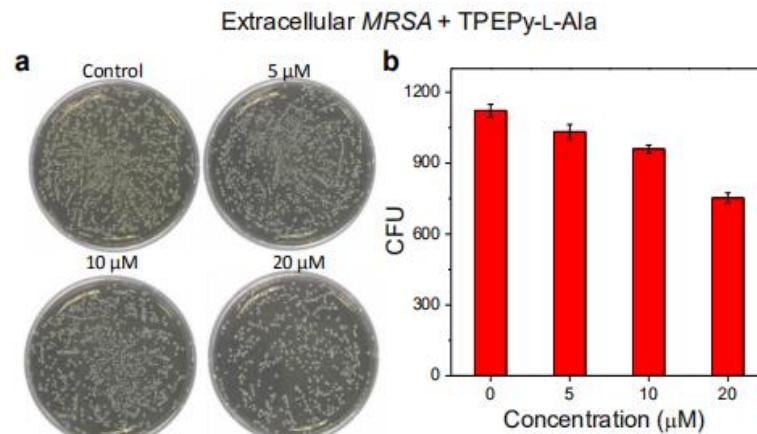
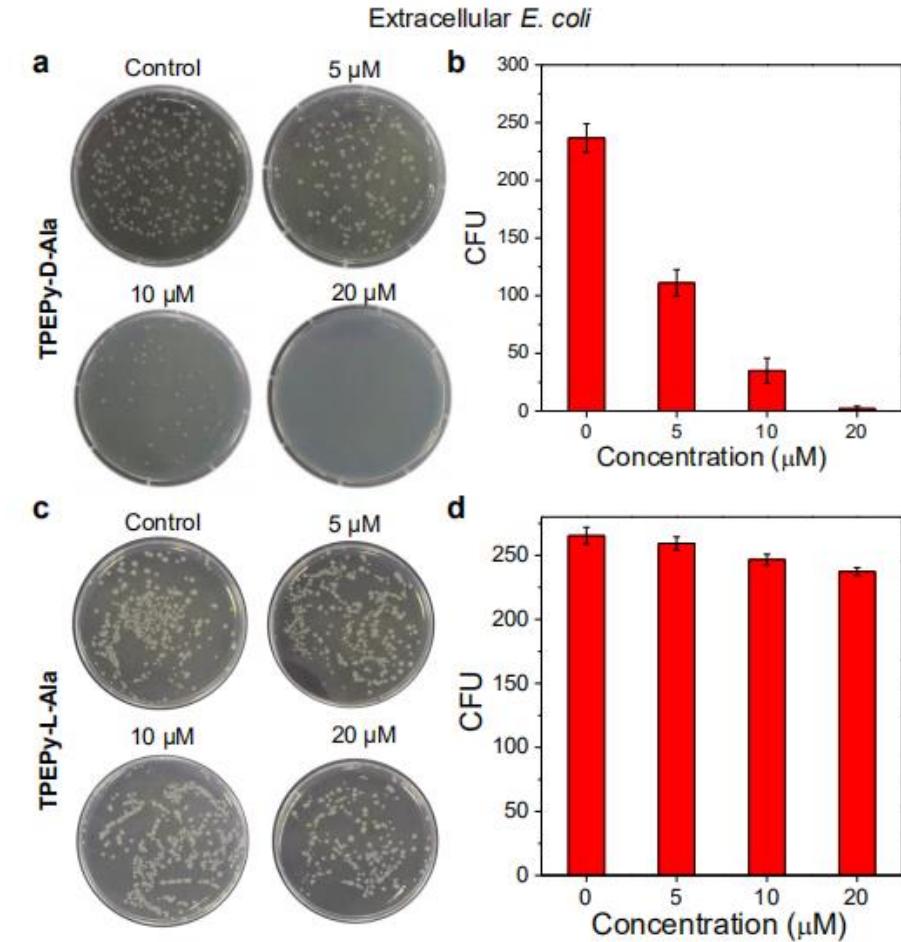
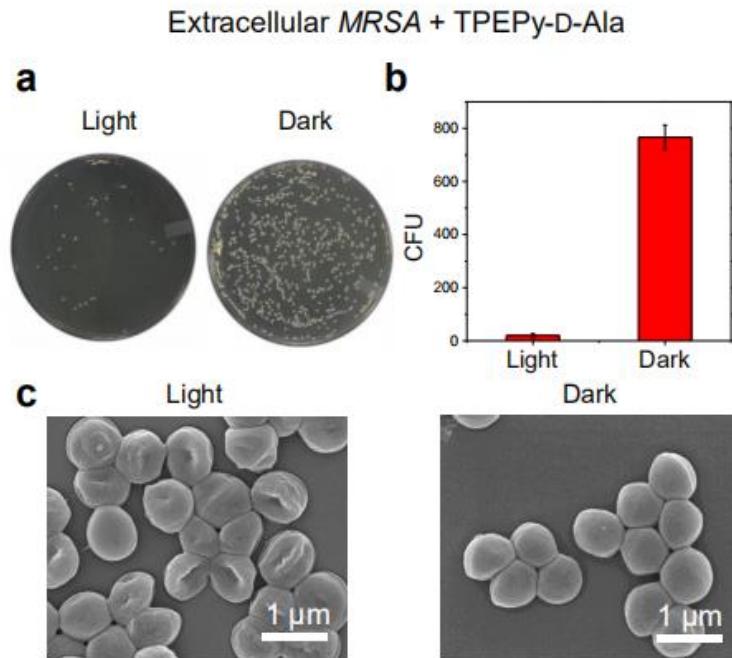


Fig. S15





Result and Discussion

细胞内细菌的光动力消融

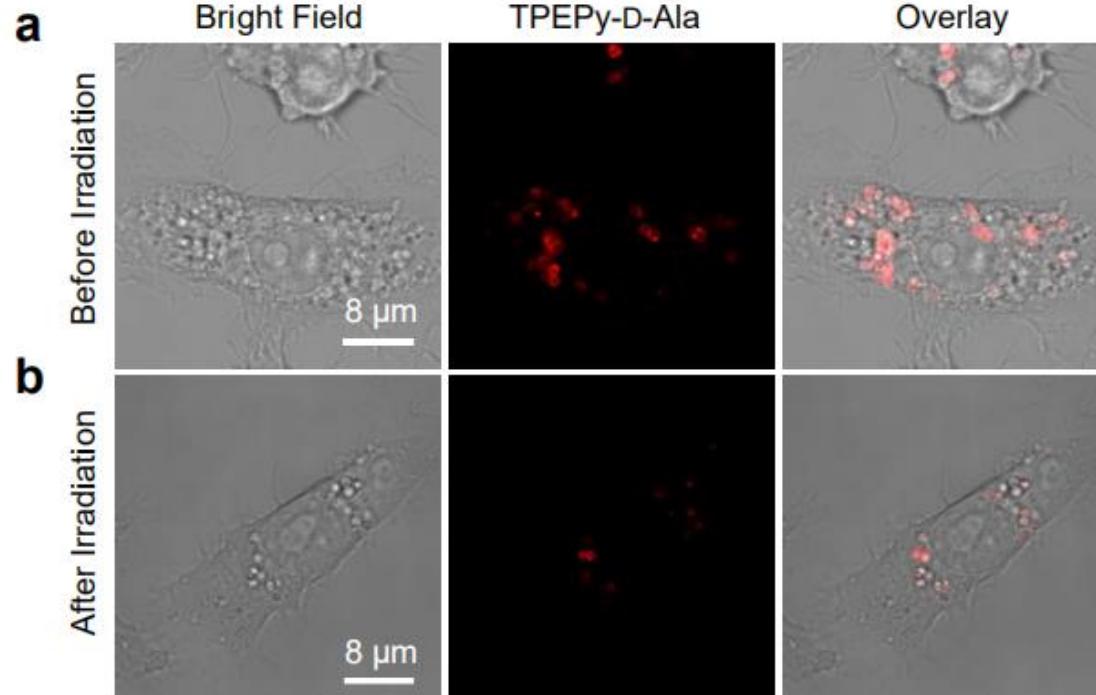


Fig. S22

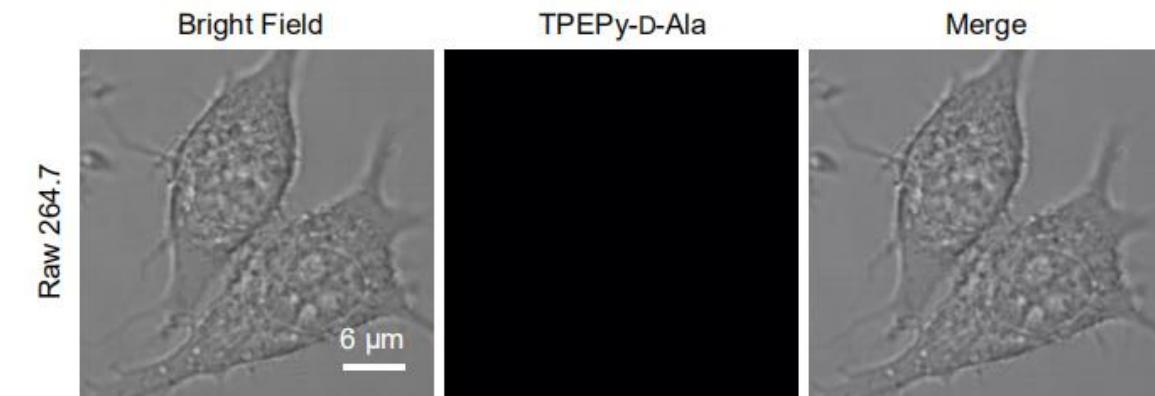
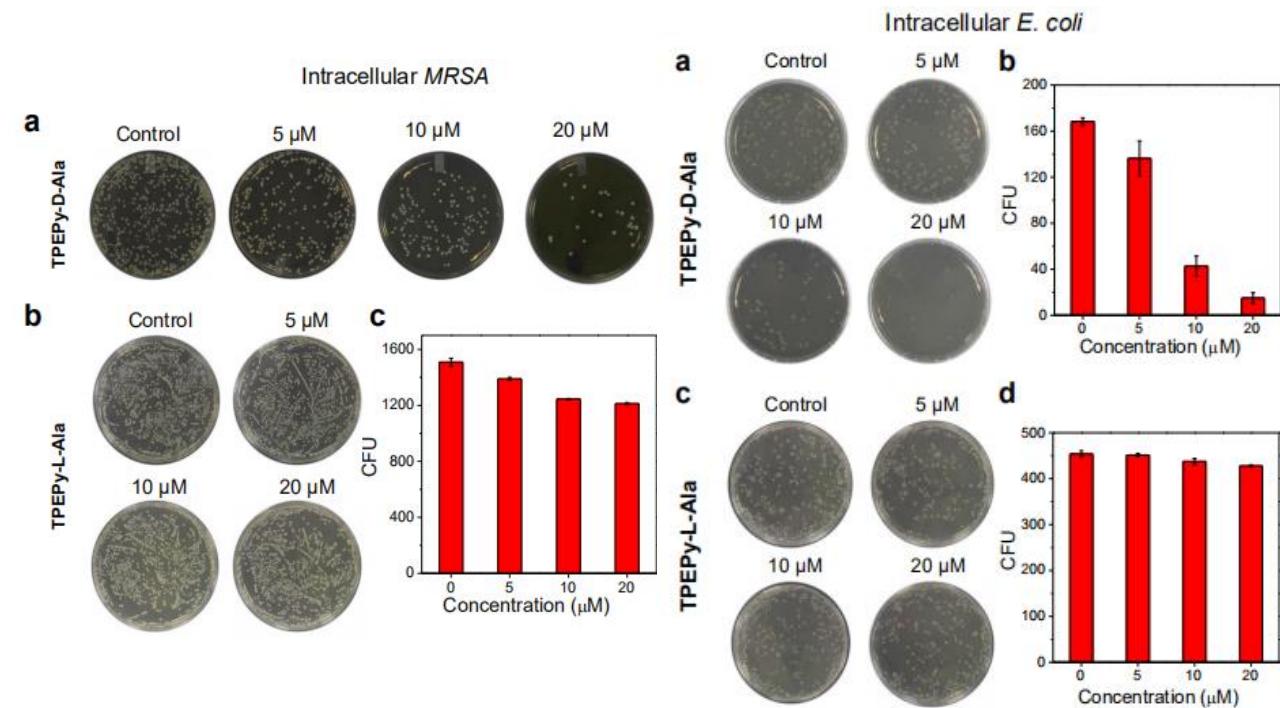
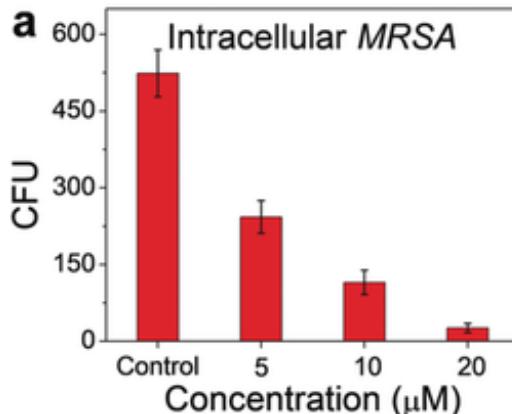


Fig. S12