

**PEGylated Dihydromyricetin-loaded nanoliposomes coated tea saponin synthesis
inhibit bacterial oxidative respiration and energy metabolism**

Fan Luo^a, Dandan Zeng^a, Renxiang Chen^a, Ayesha Zafar^{d,e}, LingWeng^a, Wenxiong Wang^b, Yubo
Tian^{a,c}, Murtaza Hasan^{*a,e} and Xugang Shu^{*a,c}

-
- ^a School of Chemistry and Chemical Engineering, Zhongkai University of Agriculture and Engineering, Guangzhou, 510225, P.R. China.
- ^b School of Energy and Environment and State Key Laboratory of Marine Pollution, City University of Hong Kong, Kowloon, 999077, Hong Kong, China
- ^c Guangdong Province Key Laboratory of Waterfowl Healthy Breeding, Guangzhou 510225, China.
- ^d Department of Biomedical Engineering, College of Future Technology, Peking University, Beijing, 100871, China.
- ^e Department of Biotechnology, The Institute of Biochemistry, Biotechnology and Bioinformatics, The Islamia University of Bahawalpur, 63100, Pakistan

AUTHOR INFORMATION

Corresponding author:

Dr Murtaza Hasan & Professor Xugang Shu

Email: murtaza@zhku.edu.pk & xgshu@21cn.com

Phone: 86-020-8900-3114.

Fax: 86-020-8900-3114.

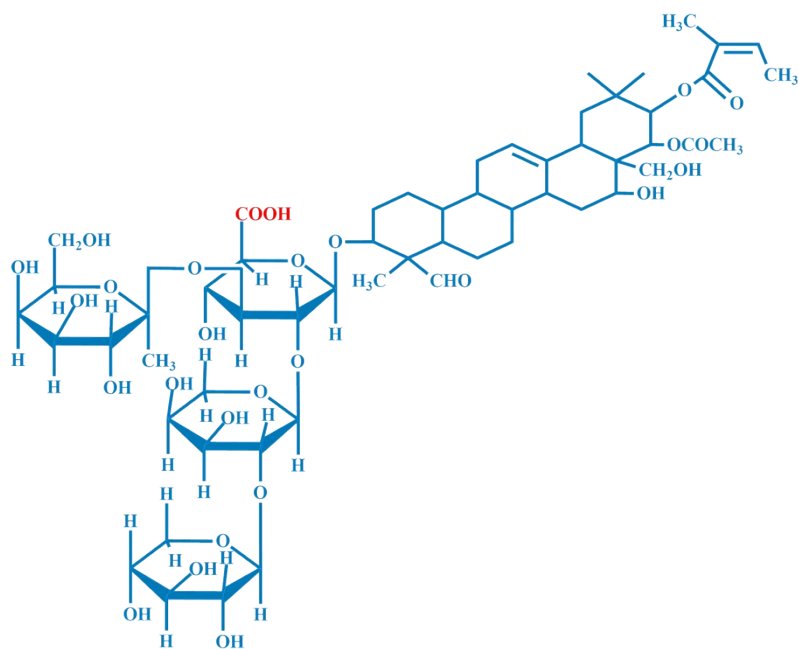


Fig. S1. Molecular structure of TS

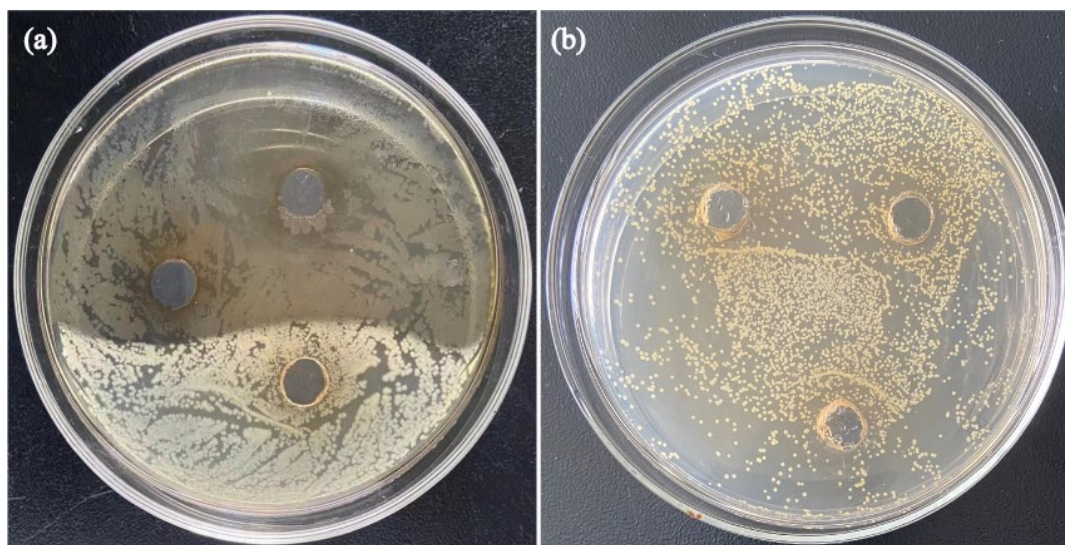


Fig. S2. Antibacterial activity: (a) *E. coli* treated by DMY; (b) *S. aureus* treated by

DMY

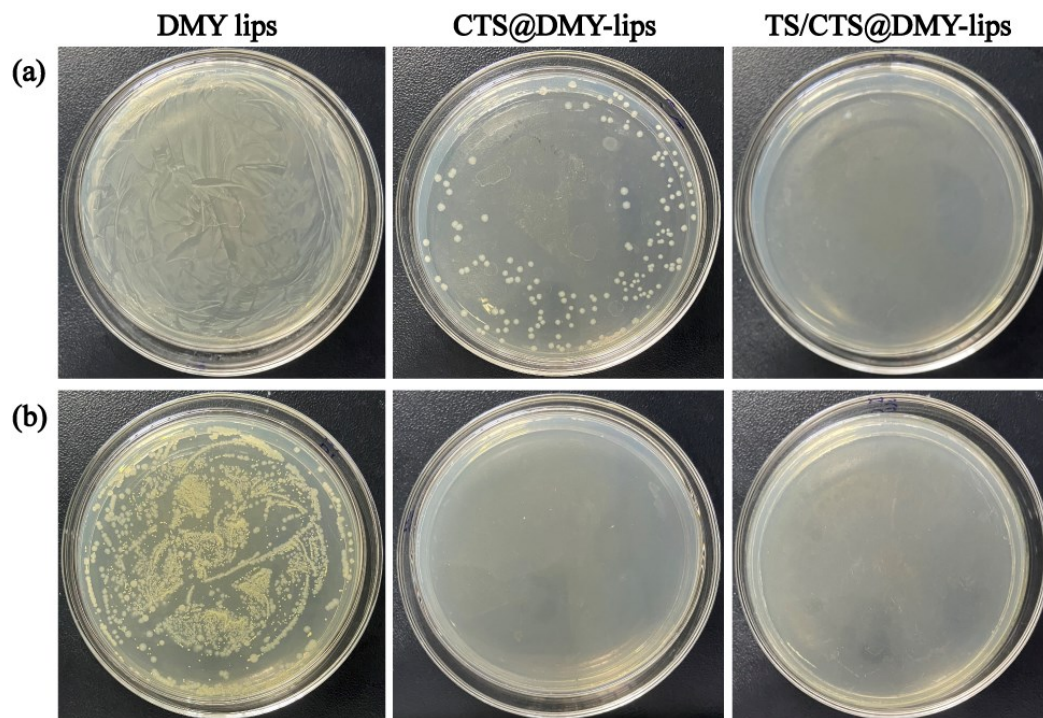


Fig. S3. Representative images of (a) *E. coli* and (b) *S. aureus* colonies cultured after treatment with the different drugs for 24 h