



1 *Supplementary Materials*

2 **PEG-8 Laurate Fermentation of *Staphylococcus***
3 ***epidermidis* Reduces the Required Dose of**
4 **Clindamycin Against *Cutibacterium acnes***

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41 1. Supplementary Information

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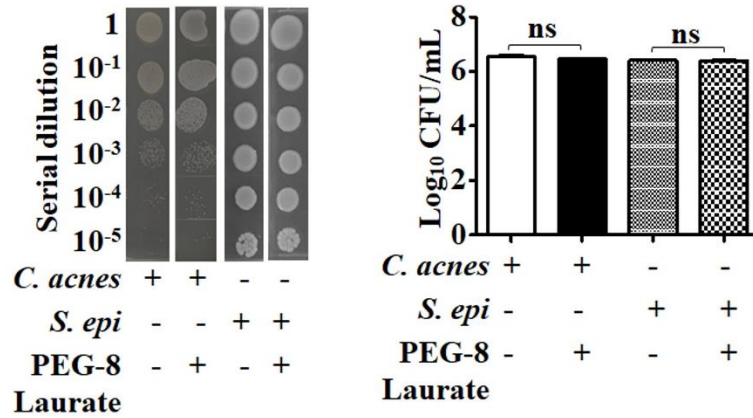
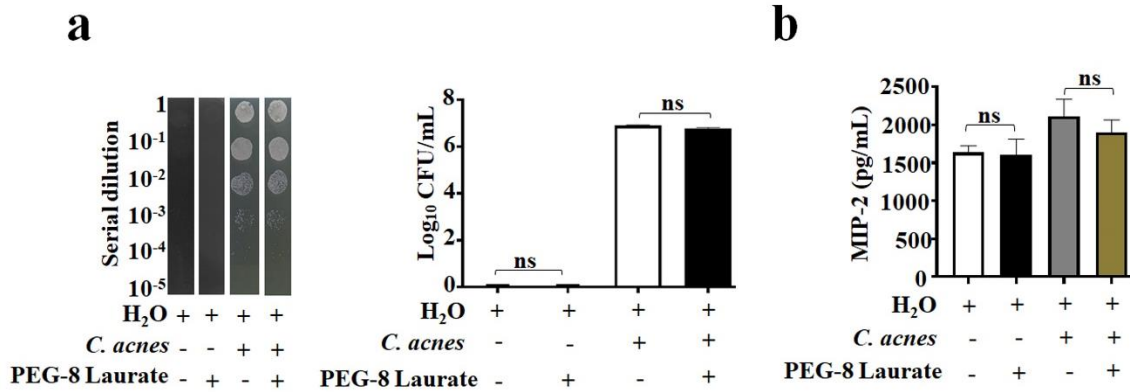
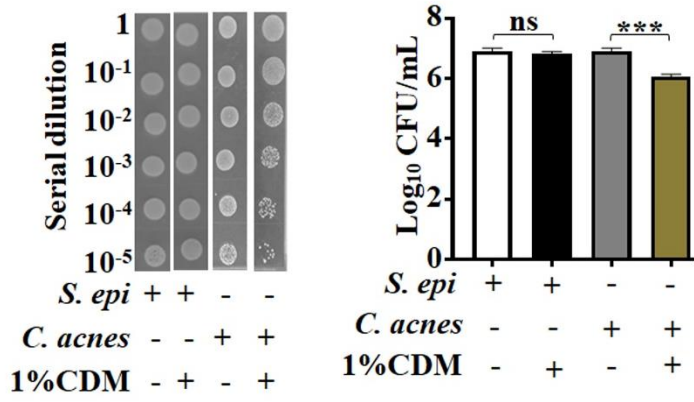


Figure S1. No effect of PEG-8 Laurate on the growth of *C. acnes* or *S. epidermidis*. *C. acnes* or *S. epidermidis* (*S. epi*) (10⁵ CFU/mL) was incubated with and without 2% PEG-8 Laurate for 12 h. The CFUs (Log₁₀ CFU/mL) were calculated by plating serial dilutions (1:10⁰-1:10⁵) of *C. acnes* or *S. epidermidis* (*S. epi*) on RCM or TSB plates, respectively, 1 day. Data are represented as the mean ± SD of three separate experiments. ns = non-significant.



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 83 **Figure S2.** No influence of PEG-8 Laurate on the growth of *C. acnes* and *C. acnes*-induced MIP-2 production.
 84 The ears of ICR mice were intradermally injected with *C. acnes* (10⁷ CFU) with and without 2% PEG-8 Laurate
 85 for 5 d. Mice ears injected with H₂O was included as control. (a) the number (Log₁₀ CFU) of *C. acnes* in ear
 86 homogenates, and (b) the levels of MIP-2 cytokines were quantified as described in Materials and Methods.
 87 Data are represented as the mean ± SD of three separate experiments using three mice per group; ns = non-
 88 significant.



105 **Figure S3.** Inhibition of *C. acnes* growth by clindamycin. *S. epidermidis* (*S. epi*) or *C. acnes* (10⁷ CFU) was
 106 incubated with and without 1% clindamycin (CDM) for 24 h. After plating serial dilution (1:10⁰-1:10⁵) of
 107 bacterial cultures on agar plates, the CFUs (Log₁₀ CFU/mL) of *S. epi* and *C. acnes* were quantified. Data are
 108 represented as the mean ± SD, *** *p* < 0.001 (two-tailed t-tests); ns = non-significant.