

Supplementary data

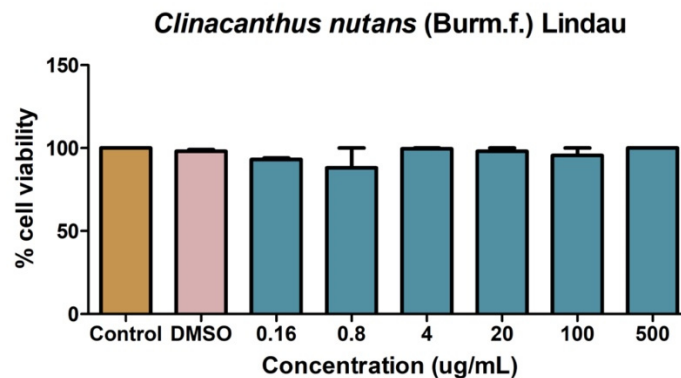


Figure S1 The cytotoxicity effect of *C. nutans* extract on CPAE cells. The cells were plated the day prior to the experiment at a density of approximately 7000 cells/well in the 96-well plates. At the time of experiment, the crude extract was prepared in serial concentrations ranged from 0.16-500 $\mu\text{g/mL}$ and added to the CPAE cells (100 μL per well). After 24 hours of treatment, the cells were investigated for the cell viability by using PrestoBLUE™ cell viability reagent. The data was analyzed as the percentage of cell viability where the non-treatment control was set as 100%.

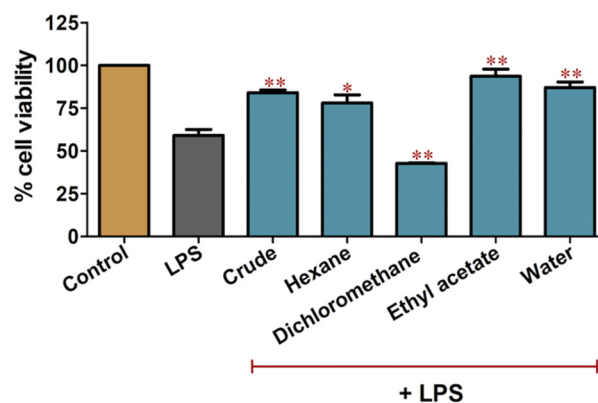


Figure S2 The effect of *C. nutans* extract fractions to rescue the LPS-induced cell death. The cells were plated the day prior to the experiment at a density of approximately 7000 cells/well in the 96-well plates. The cell viability after treatment with LPS (10 ng/mL) in the presence or absence of *C. nutans* extract fractions (100 $\mu\text{g/mL}$) at 24 hours. After 24 hours of treatment, the cells were investigated for the cell viability by using PrestoBLUE™ cell viability reagent. The data was analyzed as the percentage of cell viability where the non-treatment control was set as 100%.

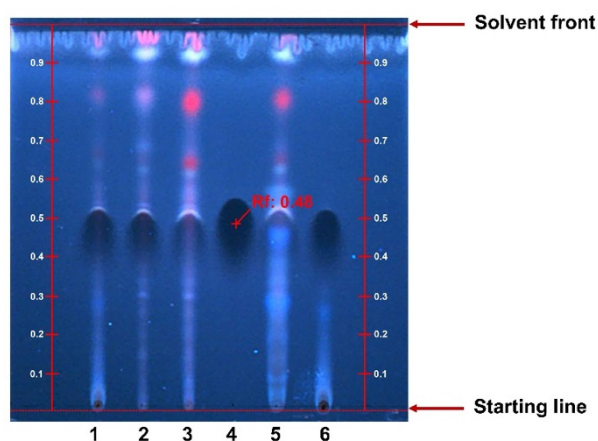


Figure S3 TLC chromatogram of *C. nutans* fractions (1); hexane fraction (2); dichloromethane fraction (3); glyceryl 1,3 distearate, Rf 0.48 (4); ethyl acetate fraction (5); and water fraction (6) at UV 366 nm.

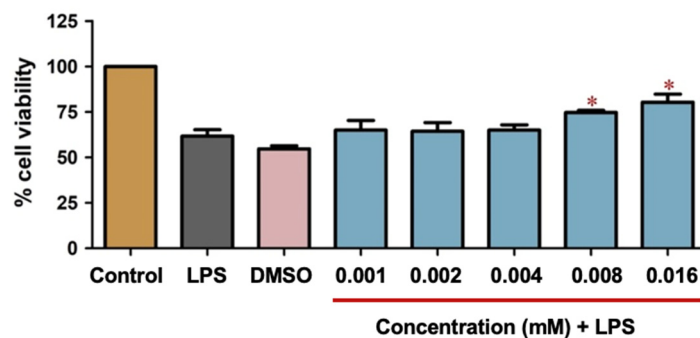


Figure S4 The effect of glyceryl 1,3 distearate to rescue the LPS-induced cell death and inflammation in CPEA cells. The cells were plated the day prior to the experiment at a density of approximately 7000 cells/well in the 96-well plates. At the time of experiment, LPS (10 ng/mL) was treated to the cells in presence or absence of glyceryl 1,3 distearate was prepared in serial concentrations ranged from 0.001-0.016 mM and added to the CPAE cells (100 μ L per well). After 24 hours of treatment, the cells were investigated for the cell viability by using PrestoBLUE™ cell viability reagent. The data was analyzed as the percentage of cell viability where the non-treatment control was set as 100%.

Table S1 Antibacterial activity of glyceryl 1,3-distearate against *E. coli* using agar disc diffusion method. The clear zone was measured and summarized in the table (mean \pm standard deviation) where the gentamycin was used as the positive control.

Herb Extract	Clear Zone (mm)
<i>Clinacanthus nutans</i> (Burm.f.) Lindau (500 mg/mL)	7 \pm 0.00
Glyceryl 1,3-distearate (1.6 mM)	0.00
Gentamycin (2 mM)	20.33 \pm 1.52

Table S2 List of real-time PCR primers.

Genes	Forward primer (5'→3')	Reverse primer (5'→3')
<i>IL1β</i>	GAGGCTGATGGCCCTAAACA	GTAGGCACTGTTCTCAGCTT
<i>IL6</i>	CACCCAGGCAGACTACTTC	CCCAGATTGGAAGCATCCGT
<i>CXCL3</i>	ATACAGAGCGTGAAGGTGACG	ATGGGAGCTTCAGGGTTGAG
<i>CXCL8</i>	ATTCCACACCTTTCCACCCC	ACCCACTTTTCCTTGGGGTT
<i>GADPH</i>	GCTGCCCAAGAATATCATCCCT	GCAGGTCAGATCCACAACAG