Supporting Information

New Phenanthrenequinones from *Cymbidium ensifolium* Roots and Their Antiinflammatory Activity on Lipopolysaccharide-Activated BV2 Microglial Cells

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Figure S1. HR-ESI-MS spectrum of compound 1



Figure S2. UV spectrum of compound 1 (0.0625 mg in 3ml of MeOH)



Figure S3. FT-IR spectrum of compound 1



Figure S4. ¹H NMR (acetone-*d*₆, 400 MHz) spectrum of compound 1



Figure S5. ¹³C NMR and DEPT (acetone- d_6 , 100 MHz) spectra of compound 1



Figure S6. HSQC (acetone- d_6 , 400/100 MHz) spectrum of compound 1



Figure S7. HMBC (acetone-*d*₆, 400/100 MHz) spectrum of compound 1



Figure S8. NOESY (acetone- d_6 , 400 MHz) spectrum of compound 1



Figure S9. HR-ESI-MS spectrum of compound 2



Figure S10. UV spectrum of compound 2 (0.05 mg in 3ml of MeOH)



Figure S11. FT-IR spectrum of compound 2



Figure S12. CD spectrum of compound 2 (0.1 mg in 3ml of MeOH)







Figure S14. ¹³C NMR and DEPT (CDCl₃, 100 MHz) spectra of compound 2



Figure S15. HSQC (CDCl₃, 400/100 MHz) spectrum of compound 2



Figure S16. HMBC (CDCl₃, 400/100 MHz) spectrum of compound 2



Figure S17. HMBC (CDCl₃, 400/100 MHz) spectrum (expansion) of compound 2



Figure S18. NOESY (CDCl₃, 400 MHz) spectrum of compound 2



Figure S19. COSY (CDCl₃, 400 MHz) spectrum of compound 2



Figure S20. HR-ESI-MS spectrum of compound 3



Figure S21. UV spectrum of compound 3 (0.05 mg in 3ml of MeOH)



Figure S22. FT-IR spectrum of compound 3



Figure S23. ¹H NMR (acetone-*d*₆, 400 MHz) spectrum of compound 3



Figure S24. ¹³C NMR and DEPT (acetone- d_6 , 100 MHz) spectra of compound 3



Figure S25. HSQC (acetone- d_6 , 400/100 MHz) spectrum of compound 3



Figure S26. HMBC (acetone- d_6 , 400/100 MHz) spectrum of compound 3



Figure S27. HMBC (acetone- d_6 , 400/100 MHz) spectrum (expansion) of compound 3



Figure S28. NOESY (acetone- d_6 , 400 MHz) spectrum of compound 3

P-p65-NF-kB (N1)



P65-NF-kB (N1)



Beta-actin (rabbit) (N1)



Figure S29. The whole western blots of N1 (P-NF κ B, NF κ B and β -actin)

P-p65-NF-kB (N2)







Beta-actin (rabbit) (N2)



Figure S30. The whole western blots of N2 (P-NF κ B, NF κ B and β -actin)

P-p65-NF-kB (N3)







Beta-actin (rabbit) (N3)



Figure S31. The whole western blots of N3 (P-NF κ B, NF κ B and β -actin)