Antiplasmodial phloroglucinol derivative isolated from *Syncarpia glomulifera* (Myrtaceae)

Qingxi Su¹, Seema Dalal², Michael Goetz³, Maria B. Cassera², David G. I. Kingston^{1,*}

Afffiliation

¹ Department of Chemistry and Virginia Tech Center for Drug Discovery, Virginia Tech, Blacksburg, Virginia, United States

² Department of Biochemistry and Virginia Tech Center for Drug Discovery, Virginia Tech, Blacksburg, Virginia, United States

³ Natural Products Discovery Institute, Doylestown, PA, 18902, US



¹³C NMR of compound 1





¹³C NMR of compound 2





¹H NMR of compound **4**





¹H NMR of compound 6



HPLC purity check of compounds 1-5

Compound 1

Semipreparative C₁₈ column (Phenomenex Luna column, 5 μ m, 250 X10 mm) eluted with a solvent gradient from CH₃CN:H₂O, 80:20 to 85:15 from 0 to 10 min, to 90:10 from 10 to 15 min, too 100:0 from 15 to 25 min, ending with 100% CH₃CN from 25 to 35 min at a flow rate of 2.5 mL/min.

t_{R1} 26 min

<u>UV</u>





Analytical C₁₈ Cogent Bidentate column (4 μ m, 76 X 4.6 mm) eluted with a solvent gradient from CH₃CN:H₂O, 70:30 to 75:25 from 0 to 10 min, to 85:15 from 10 to 20 min, ending with 100% CH₃CN from 20 to 25 min at a flow rate of 1.5 mL/min.

t_{R2} 11.8 min



Analytical C₁₈ Cogent Bidentate column (4 μ m, 76 X 4.6 mm) eluted with a solvent gradient from CH₃CN:H₂O, 70:30 to 75:25 from 0 to 10 min, to 85:15 from 10 to 20 min, ending with 100% CH₃CN from 20 to 25 min at a flow rate of 1.5 mL/min.

t_{R3} 7.5 min

(sample was dissolved in mixture of MeOH: EtOAc)

<u>UV</u>





Analytical C₁₈ Cogent Bidentate column (4 μ m, 76 X 4.6 mm) eluted with a solvent gradient from CH₃CN:H₂O, 70:30 to 75:25 from 0 to 10 min, to 85:15 from 10 to 20 min, ending with 100% CH₃CN from 20 to 25 min at a flow rate of 1.5 mL/min.

 t_{R4} 13 min

<u>UV</u>





Analytical C₁₈ Cogent Bidentate column (4 μ m, 76 X 4.6 mm) eluted with a solvent gradient from CH₃CN:H₂O, 70:30 to 75:25 from 0 to 10 min, to 85:15 from 10 to 20 min, ending with 100% CH₃CN from 20 to 25 min at a flow rate of 1.5 mL/min.

 t_{R5} 11 min

<u>UV</u>





semipreparative C₁₈ column (Phenomenex Luna column, 5 μ m, 250 X10 mm) eluted with a solvent gradient from CH₃CN:H₂O, 50:50 to 65:35 from 0 to 15 min, to 80:20 from 15 to 20 min, ending with 100% CH₃CN from 20 to 25 min at a flow rate of 2.5 mL/min.

t_{R6} 17.5 min





