

Supporting Information

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Bioactive triterpenes from the fungus *Piptoporus betulinus*

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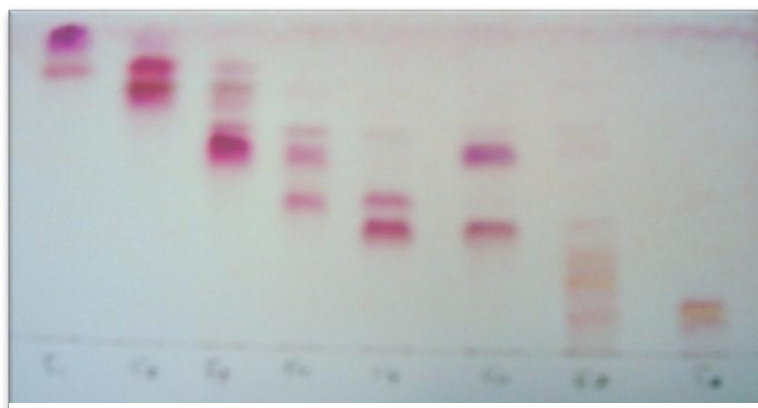


Figure 1 : TLC-chromatogram of collected fractions from ethyl acetate extract(1)

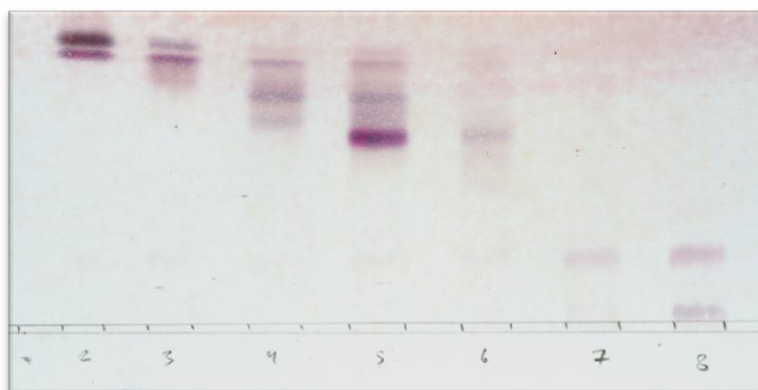


Figure 2: TLC- chromatogram of collected fractions from ethyl acetate extract(2)

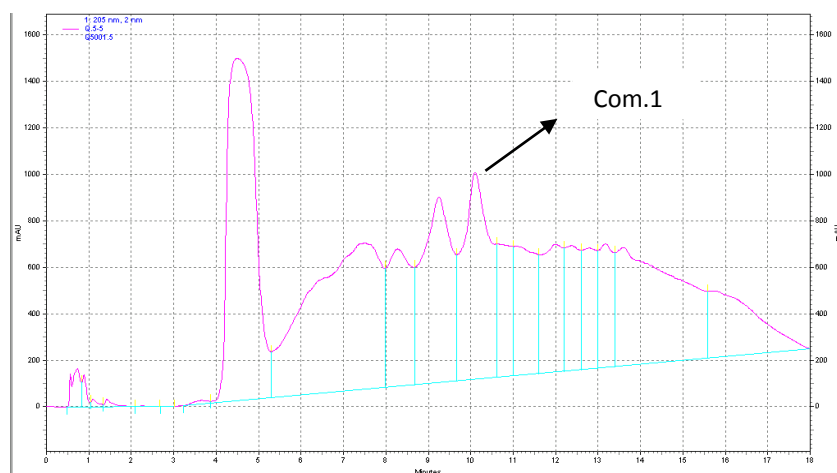


Figure 3: HPLC chromatogram of fraction Fr.14 showing compound 1

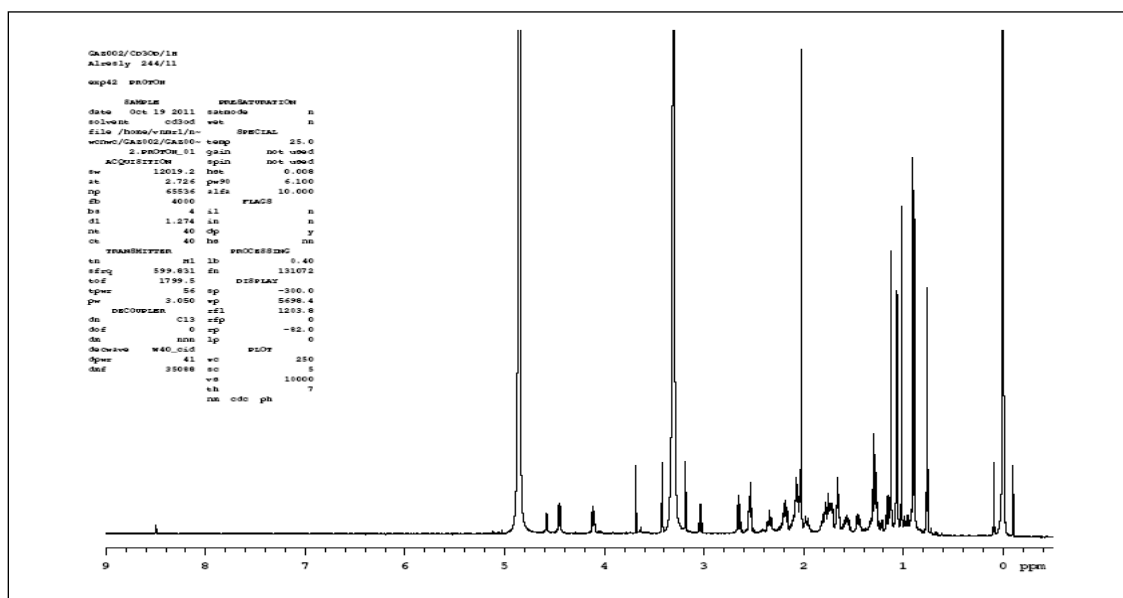


Figure 4: ^1H -NMR spectrum of compound 1

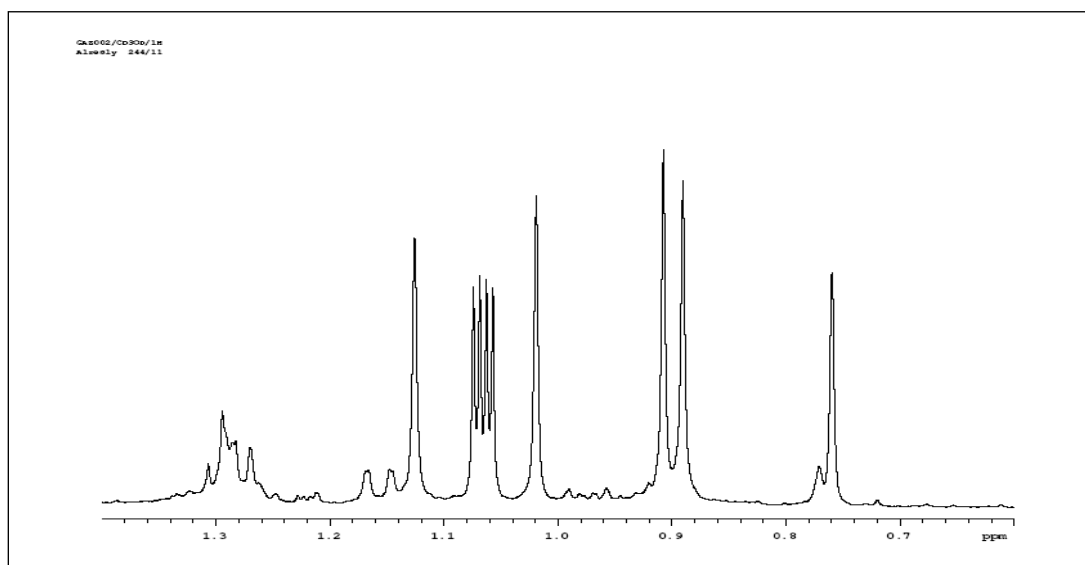


Figure 5: ^1H -NMR spectrum of compound 1 from 0.6 to 1.4 ppm

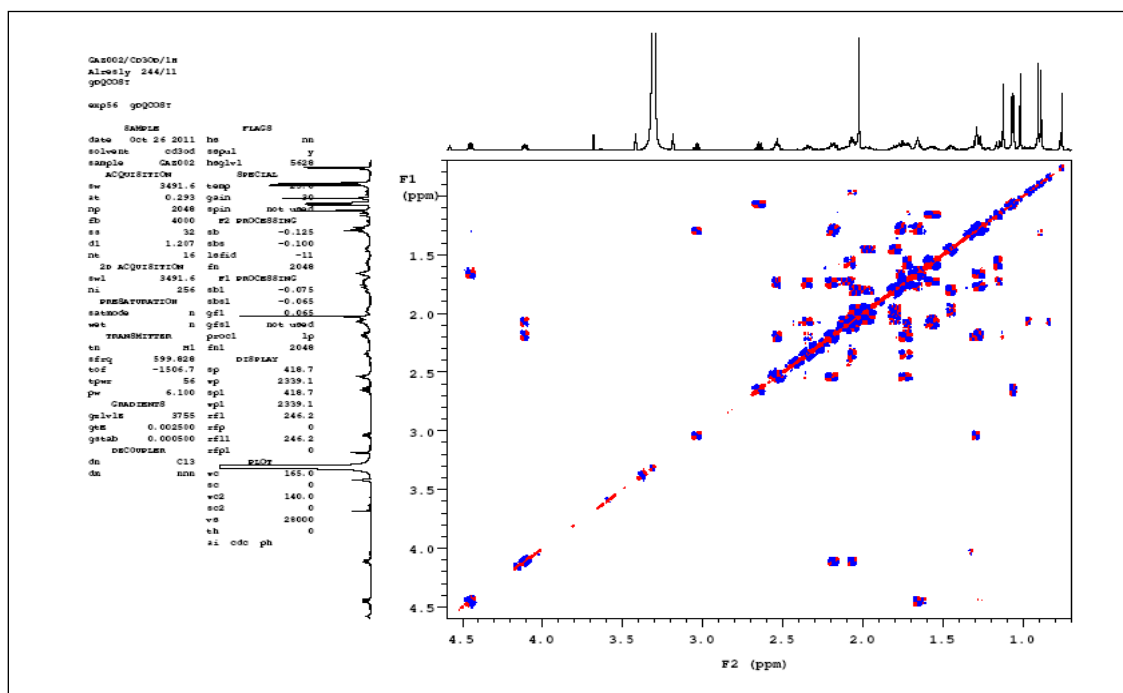


Figure 6: DQCOSY spectrum of compound 1

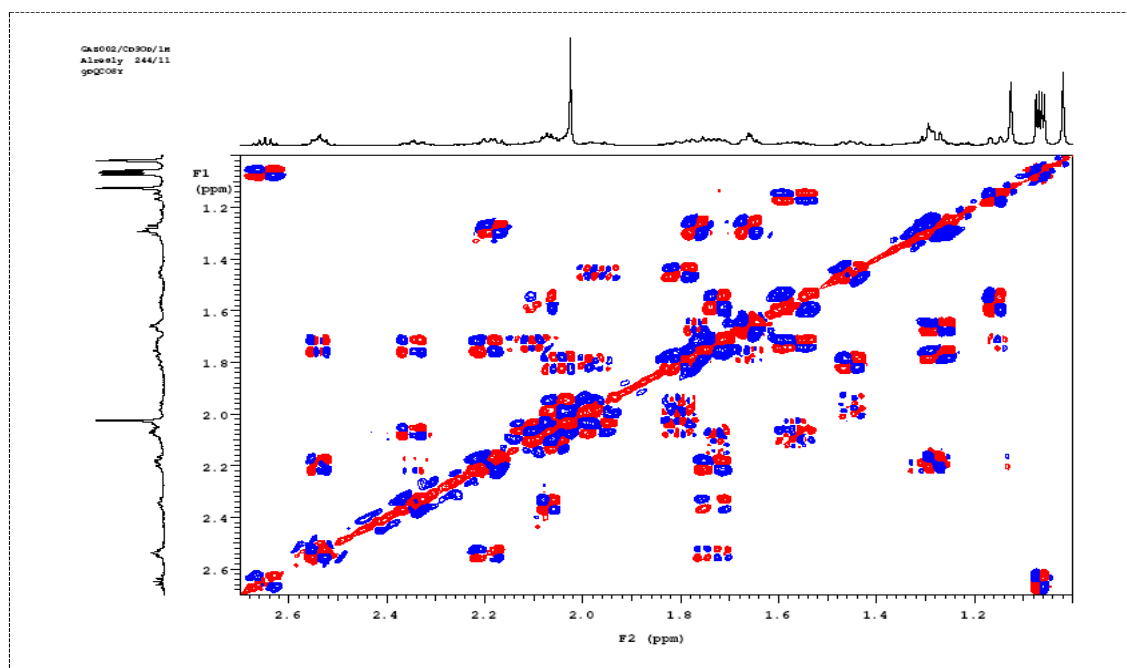


Figure 7: DQCOSY spectrum of compound 1 from 1 to 2.7 ppm (x) and 1 to 2.7 ppm (y)

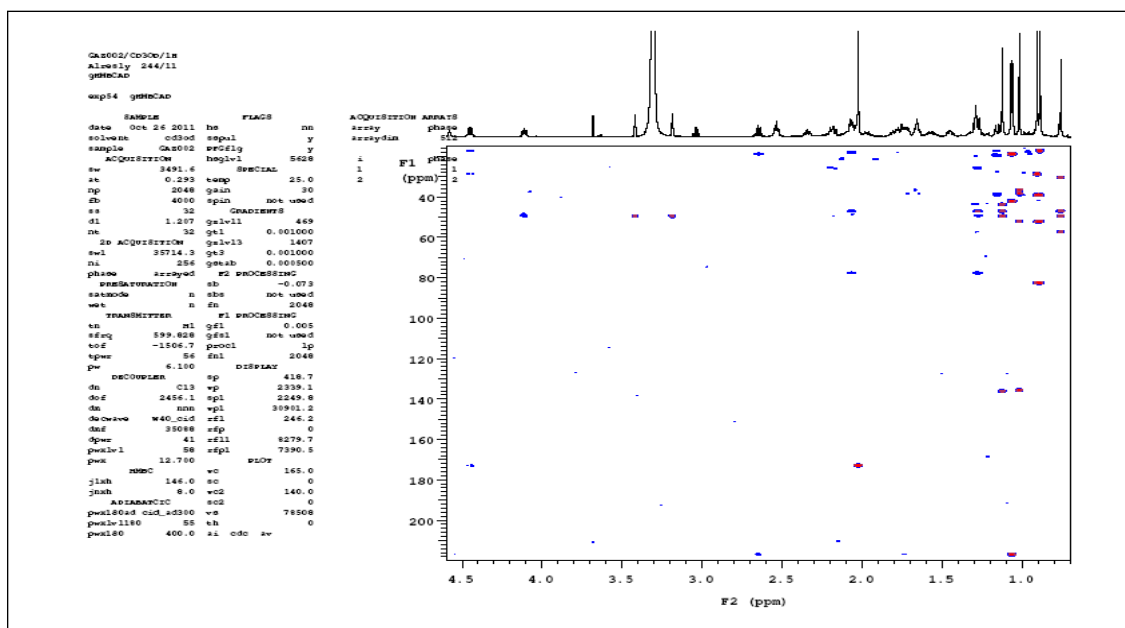


Figure 8: HMBCAD spectrum of compound 1

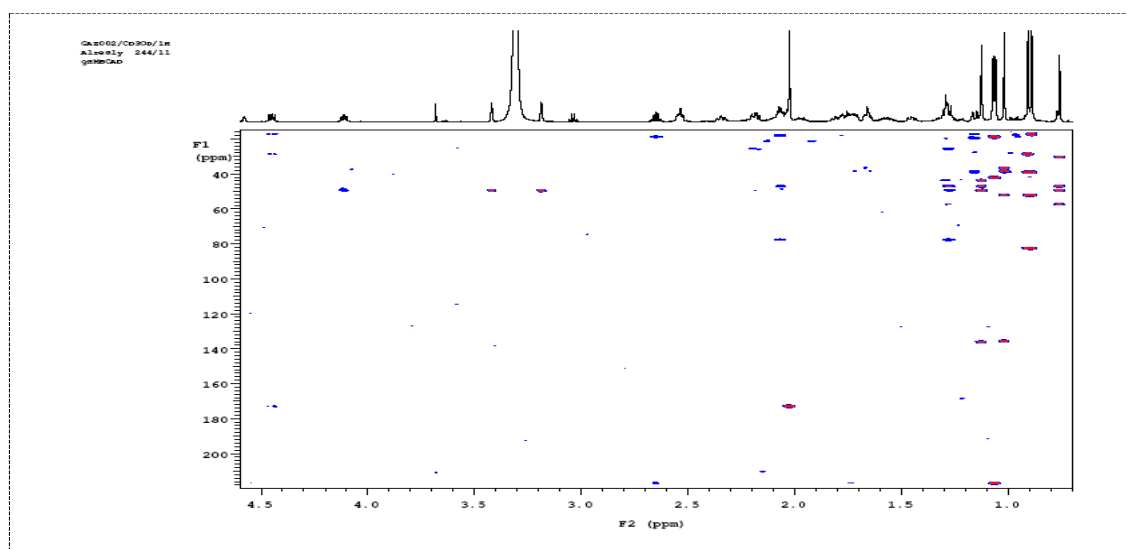


Figure 9: HMBCAD spectrum of compound 1(2)

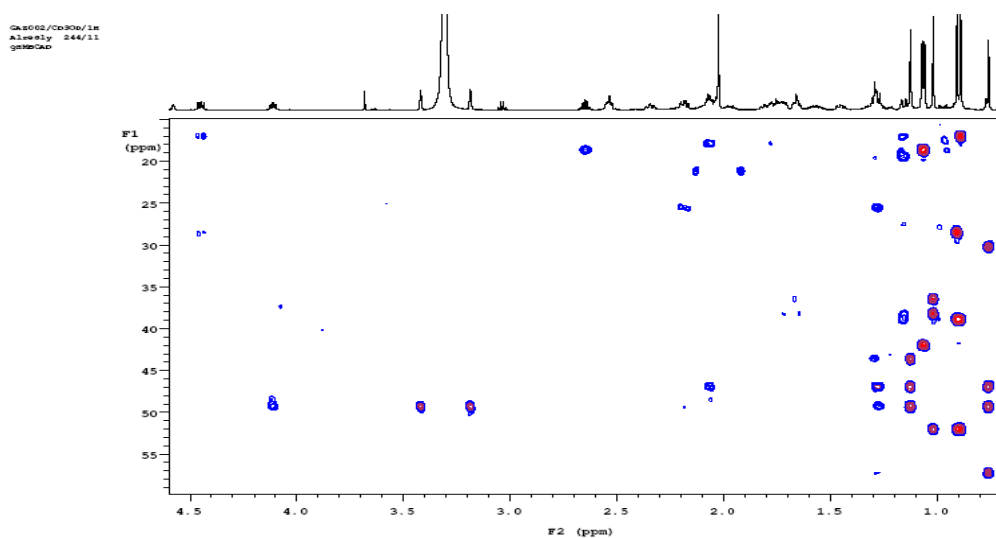


Figure 8: HMBCAD spectrum of compound 1 from 15 to 60 ppm (y)

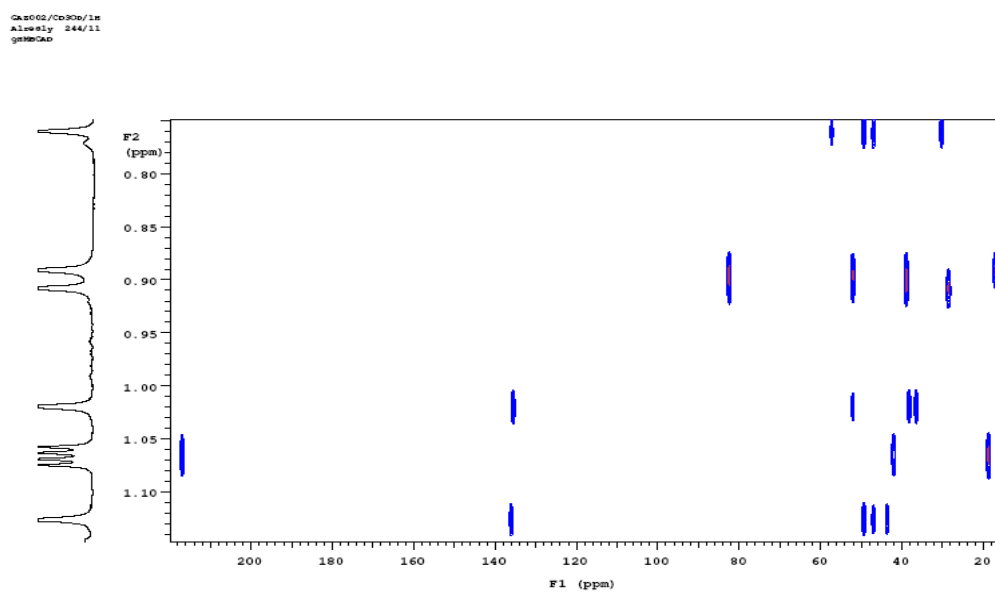


Figure 9: HMBCAD spectrum of compound 1 from 15 to 220 ppm (x) and from 0.75 to 1.15 ppm (y)

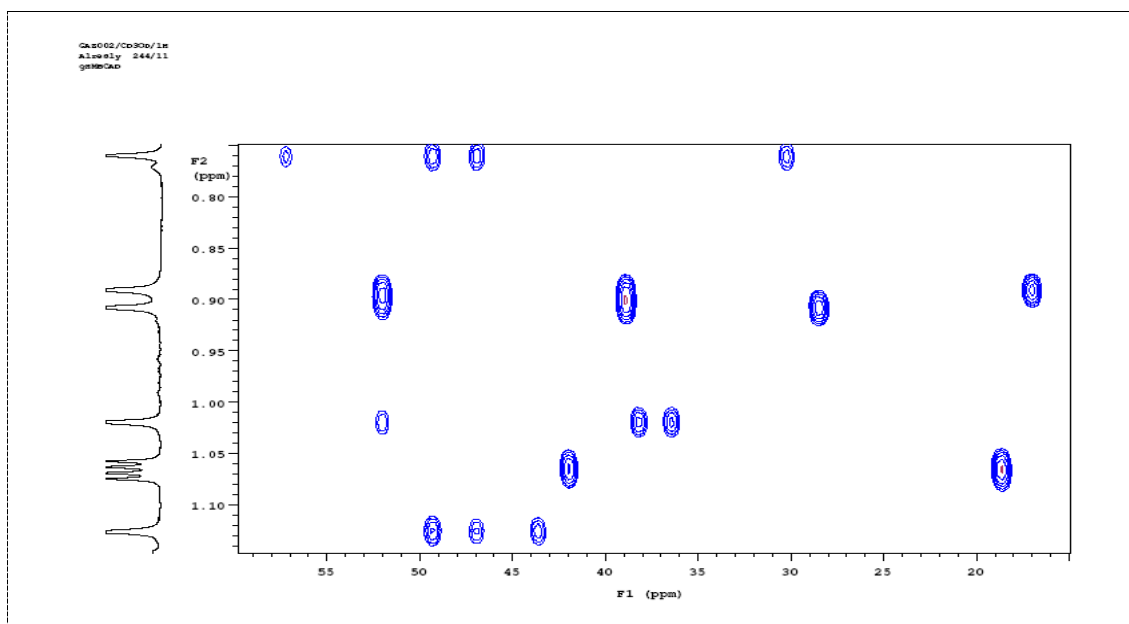


Figure 10: HMBCAD spectrum of compound 1 from 15 to 60 ppm (x) and from 0.75 to 1.15 ppm (y)

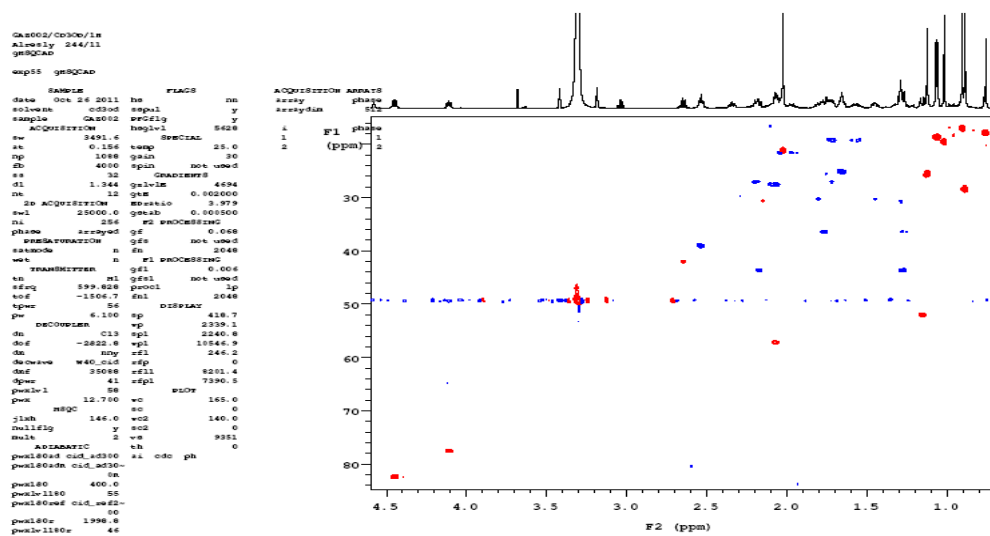


Figure 11: HSQCAD spectrum of compound 1

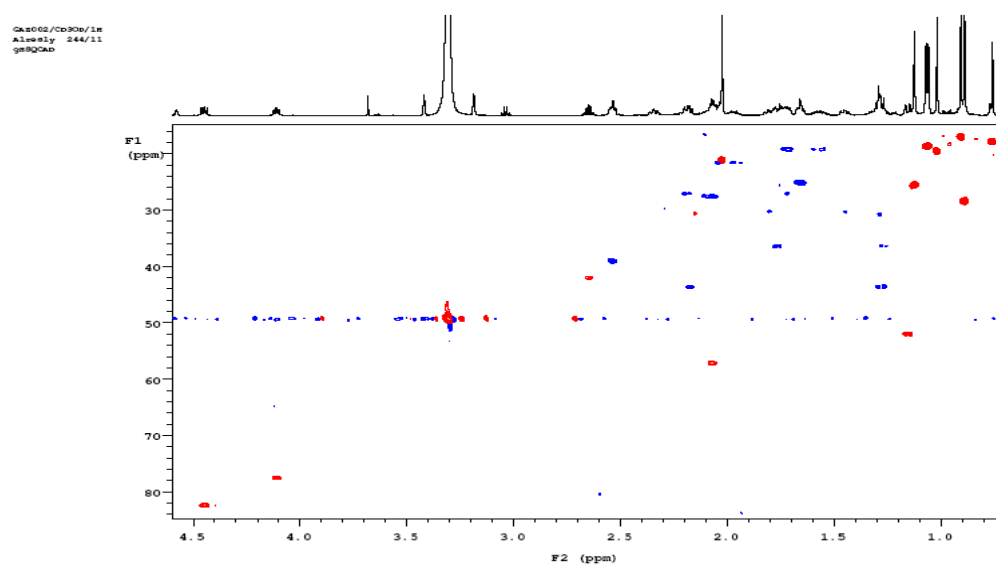


Figure 12: HSQCAD spectrum of compound 1(2)

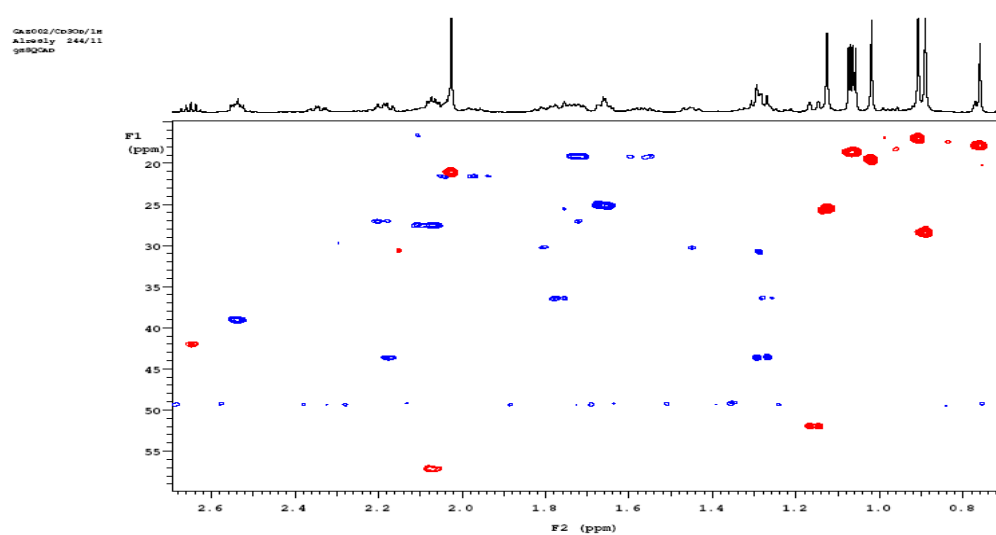


Figure 13: HSQCAD spectrum of compound 1 from 0.7 to 2.65 ppm (x) and from 15 to 60 ppm (y)

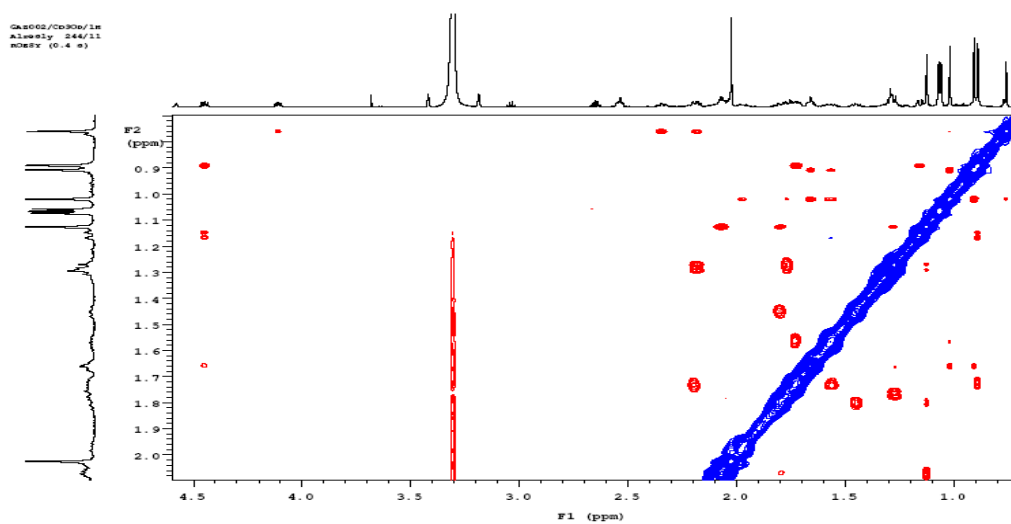


Figure 16: ROESY spectrum of compound 1 from 0.7 to 2.1 ppm (y)

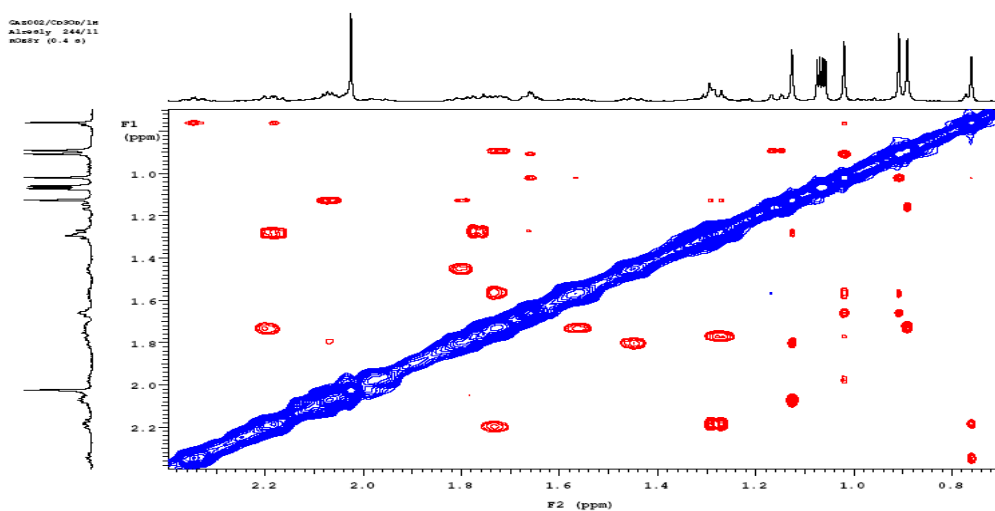


Figure 19: ROESY spectrum of compound 1 from 0.7 to 2.4 (x) ppm and from 0.7 to 2.4 ppm(y)

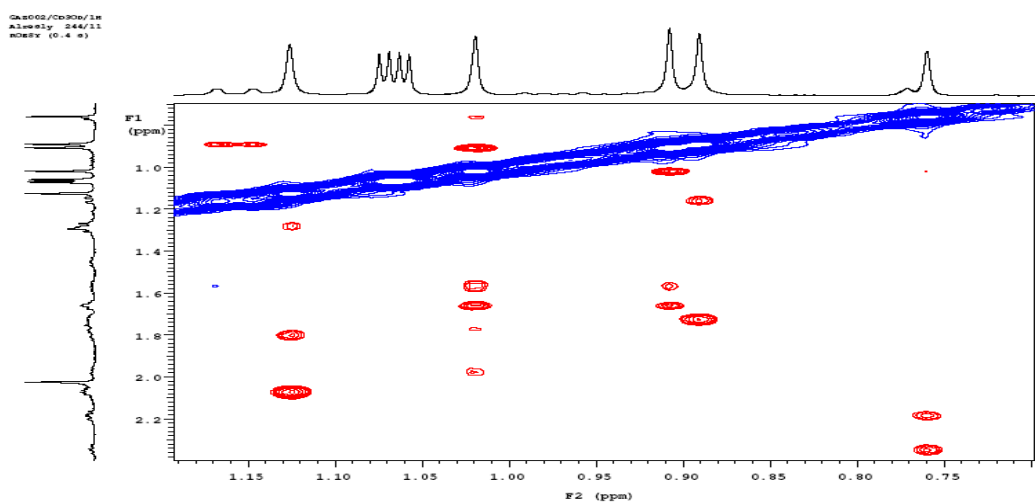


Figure 17: ROESY spectrum of compound 1 from 0.7 to 1.2 ppm (x) and from 0.7 to 2.4 ppm (y)

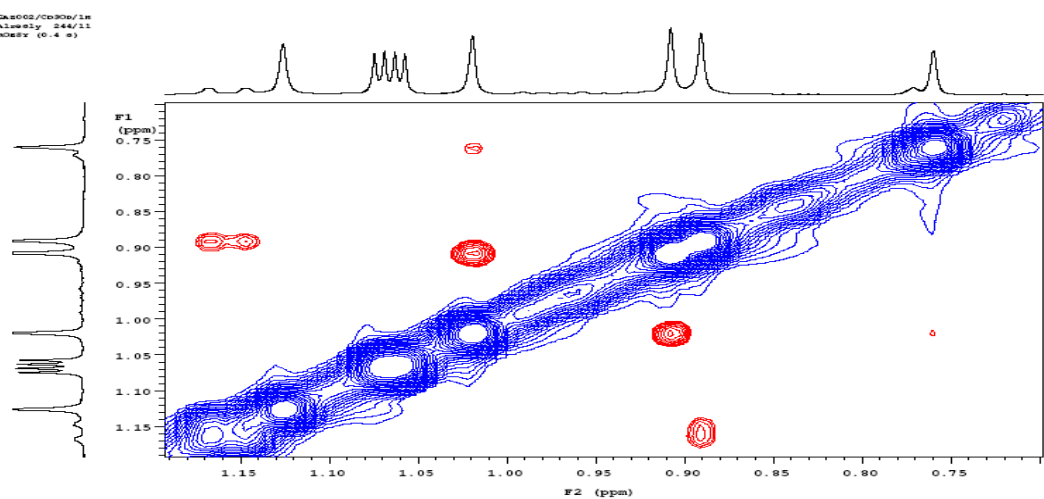
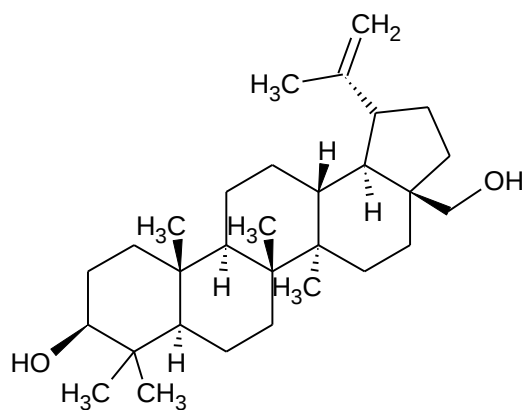
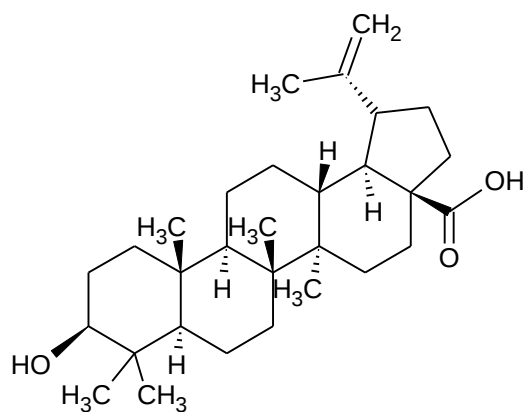


Figure 18 : ROESY spectrum of compound 1 from 0.7 to 1.2 ppm (x) and from 0.7 to 1.2 ppm (y)

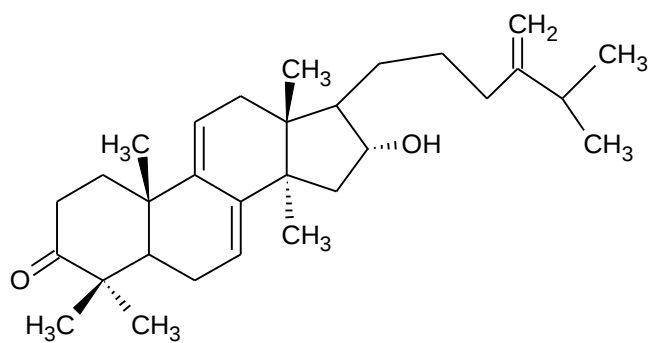
Novel
 3β -acetoxy- 16α hydroxyl- 24 -oxo- 5α -lanosta- $8(9)$ diene- 30 -oic acid
Compound (1)



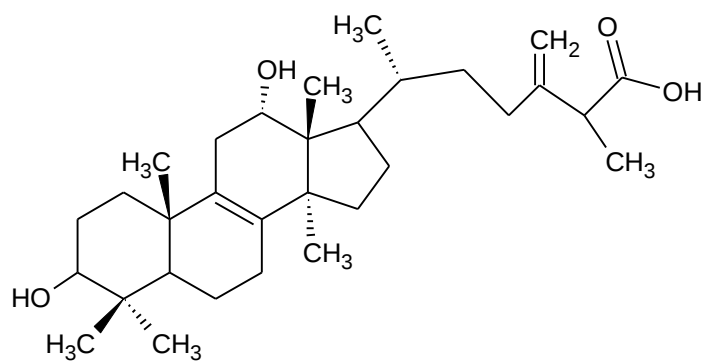
Betulin (Lup- $20(29)$ -ene- 3β , 28 -diol)
Compound (2)



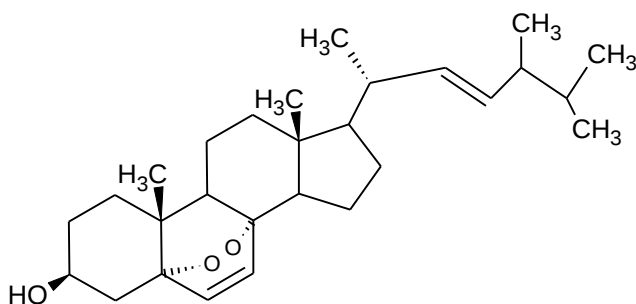
Betulinic acid ((3β)- 3 -Hydroxy-lup- $20(29)$ -en- 28 -oic acid)
Compound (3)



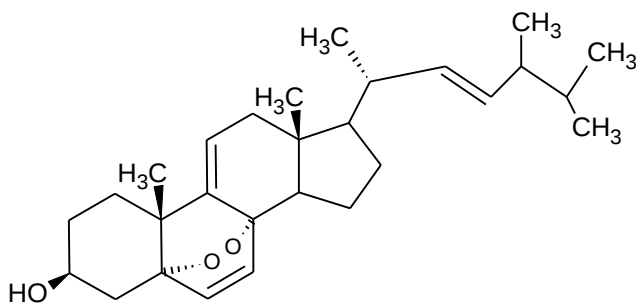
Polyporenic acid C (16α -hydroxy- 24 -methylene- 3 -oxo- 5α -lanosta- $7, 9(11)$ diene- 30 - oic acid)
Compound (4)



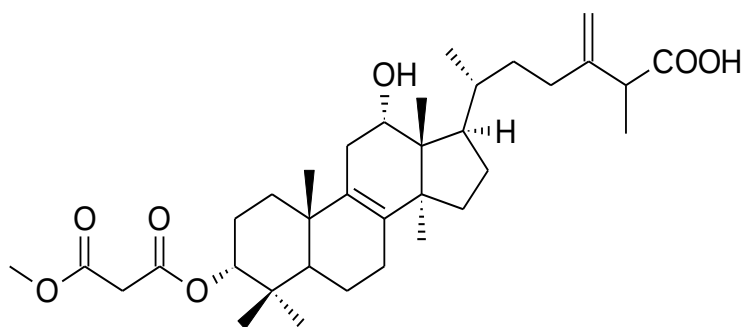
Polyporenic acid A
 (3 β , 12 α -dihydroxy-24-methylene-lanosta-8-en-26-oic acid)
Compound (5)



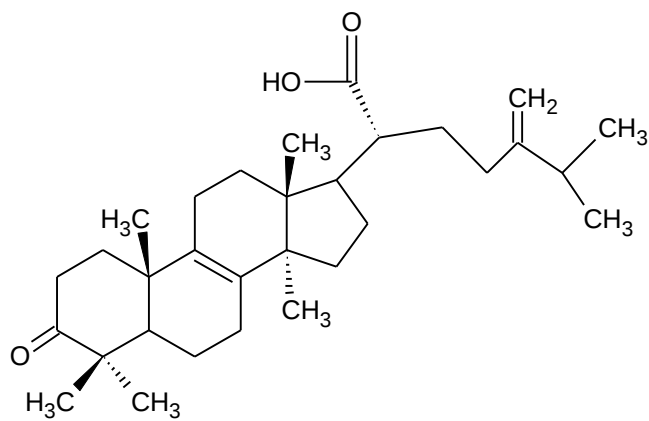
Ergosterol peroxide (5 α , 8 α -epidioxyergosta-6, 22-dien-3 β -ol)
Compound (6)



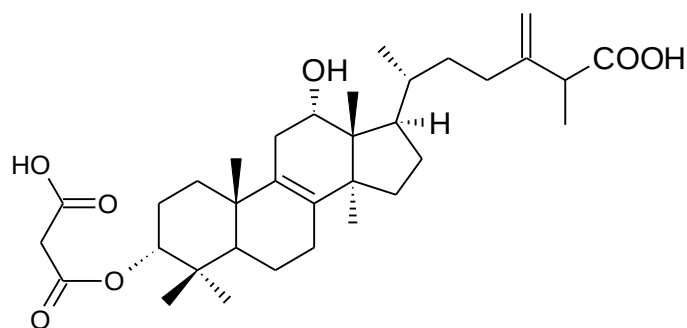
9, 11-dehydroxyergosterol peroxide (5 α , 8 α -epidioxyergosta-6, 9, 22-trien-3 β -ol)
Compound (7)



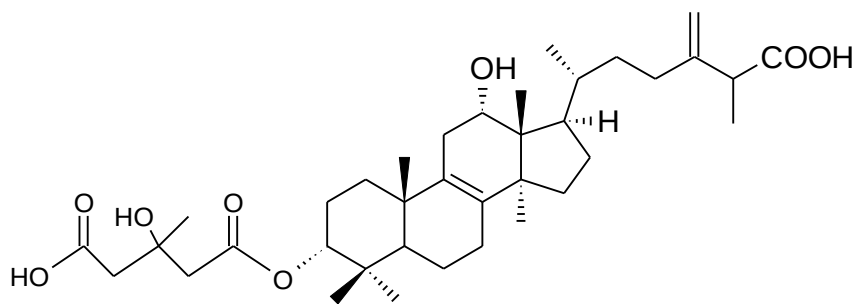
(25S)-(+)-12 α -hydroxy-3 α -methylcarboxyacetate-24-methyl lanosta-8,24(31)-diene-26-oic acid
Compound (8)



Fomefficinic acid
Compound (9)



(25S)-(+)-12 α -hydroxy-3 α -malonyloxy-24-methyl lanosta-8,24(31)-dien-26-oic acid
Compound (10)



(25S,3'S)-(+)-12 α -hydroxy-3 α -(3'-hydroxy-3'-methyl glutaryloxy)-24-methyl lanosta-8,24(31)-dien-26-oic acid
Compound (11)