

Supplementary Information

Design, synthesis, and biological evaluation of novel asiatic acid derivatives as potential anticancer agents

Bruno M.F. Gonçalves,^{a,b} Jorge A. R. Salvador,^{a,b*} Diana S. M. Santos,^a Silvia Marín,^{c,d} and Marta Cascante^{c,d*}

^a *Laboratory of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Coimbra, Portugal. Fax: +351 239 488 503; Tel: +351 239 488 400; E-mail: salvador@ci.uc.pt.*

^b *Center for Neuroscience and Cell Biology, Coimbra, Portugal.*

^c *Department of Biochemistry and Molecular Biology, Faculty of Biology, University of Barcelona, Diagonal 643, 08028 Barcelona, Spain; Tel +34-934021593; Email: martacascante@ub.edu*

^d *Institute of Biomedicine of University of Barcelona (IBUB) and Associated Unit to CSIC, Barcelona, Spain.*

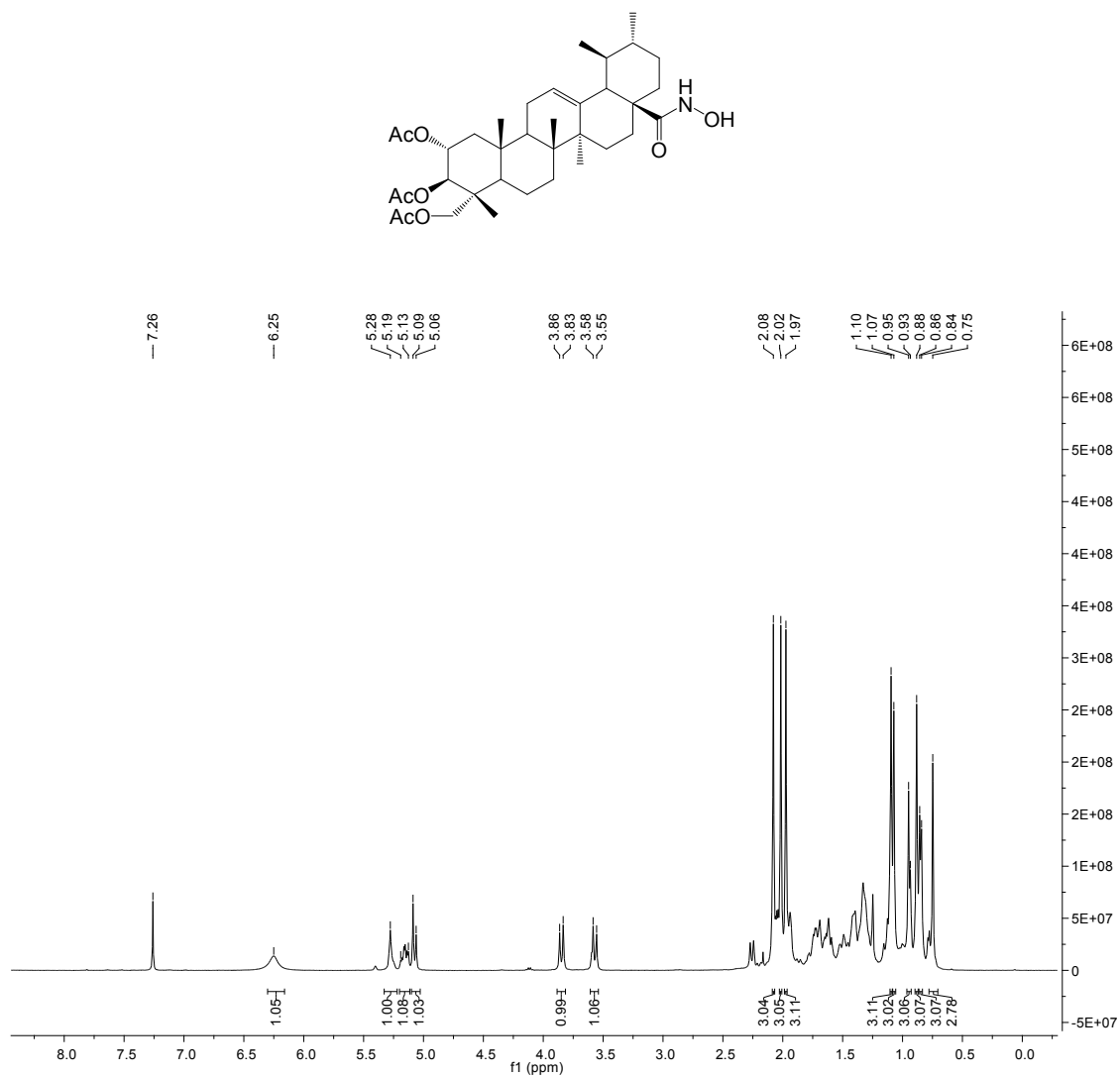
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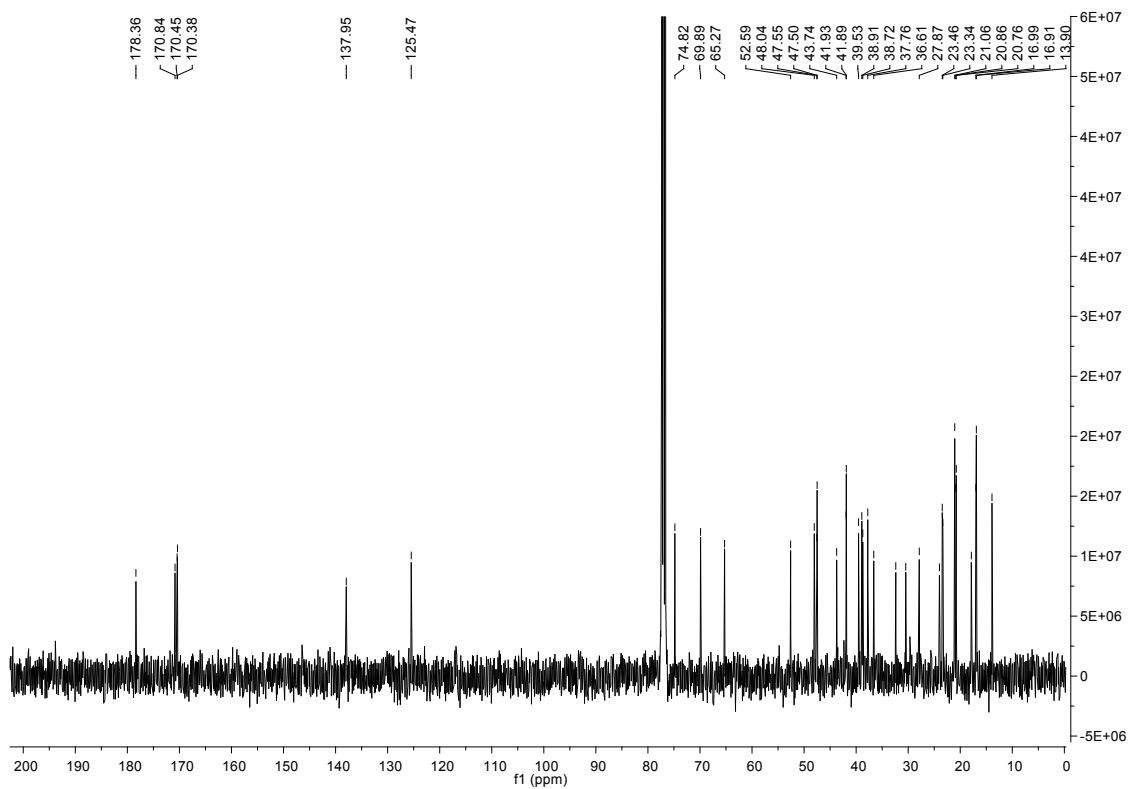
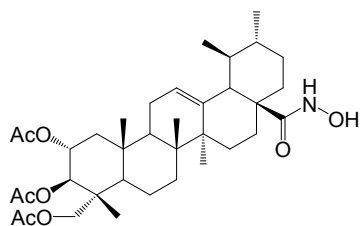
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1. NMR data for compound 7

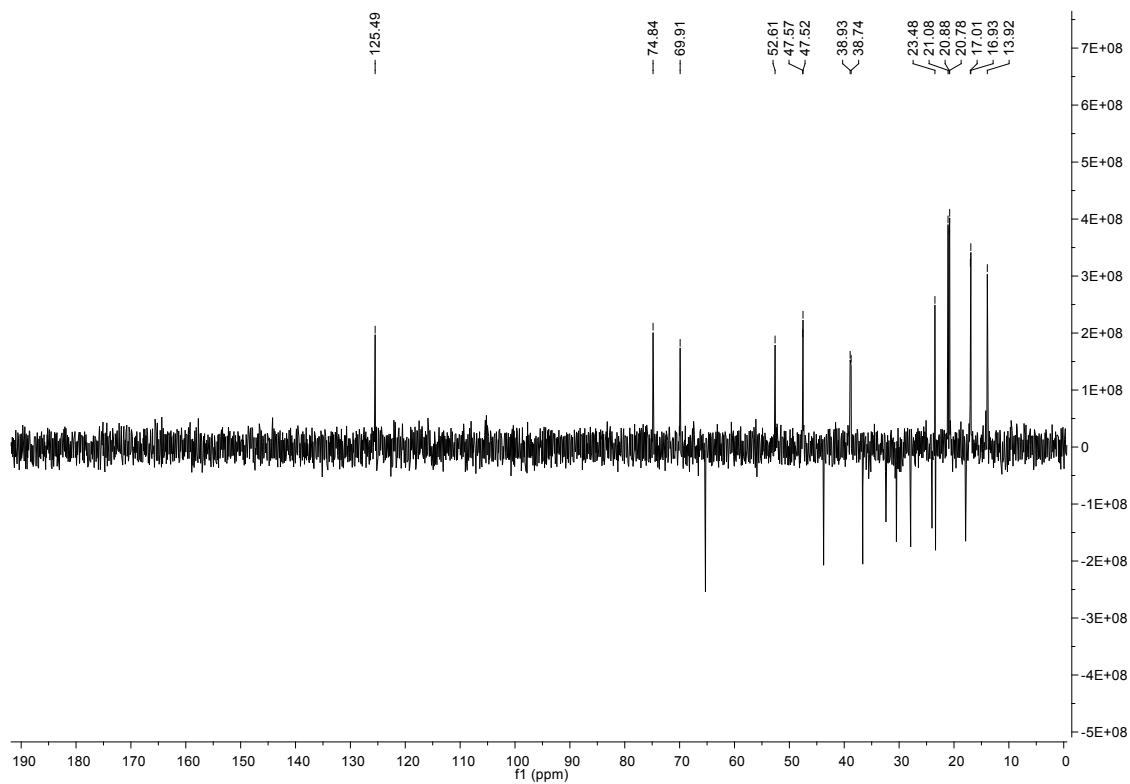
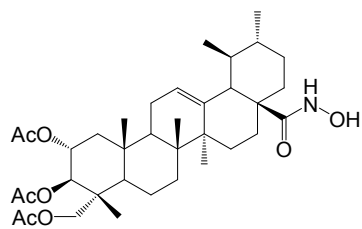
1.1 ¹H-NMR spectrum for compound 7 recorded in CDCl₃



1.2 ^{13}C -NMR spectrum for compound 7 recorded in CDCl_3

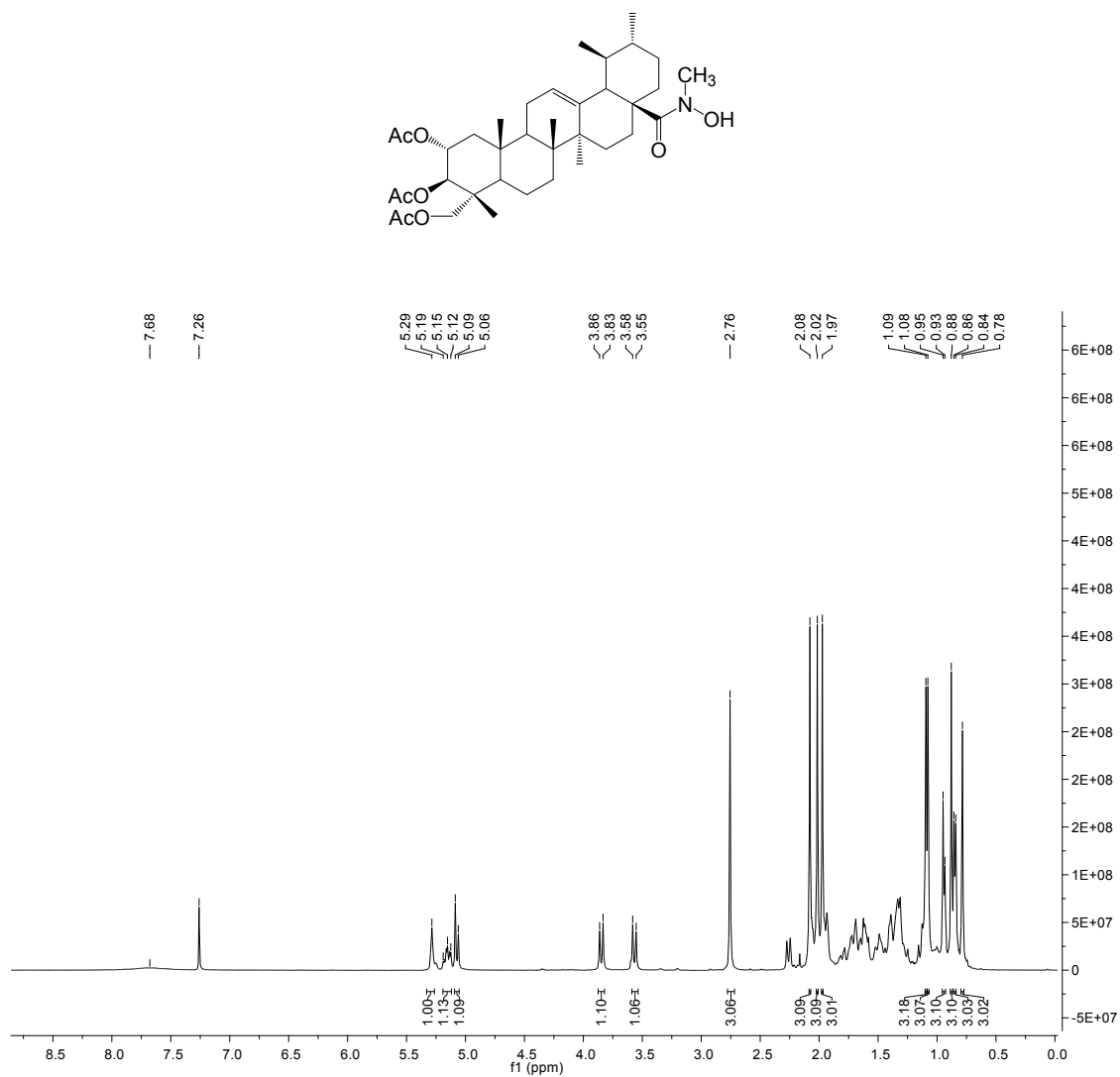


1.3 DEPT135 spectrum for compound 7 recorded in CDCl₃

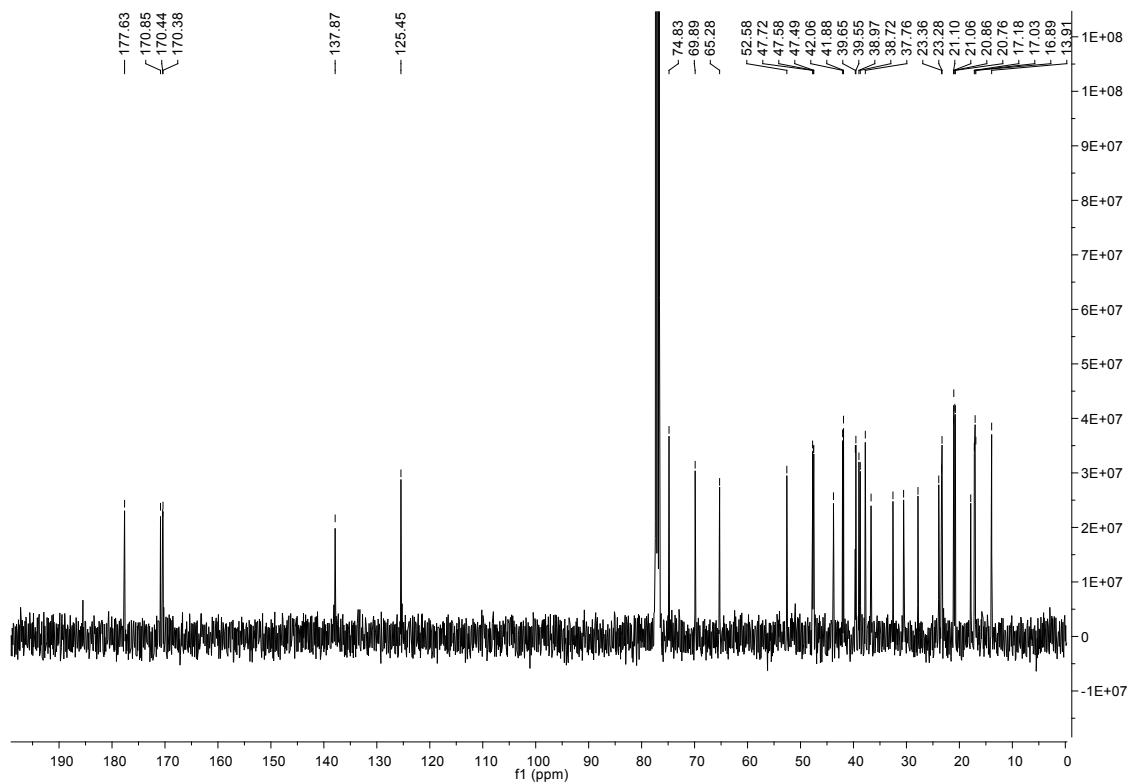
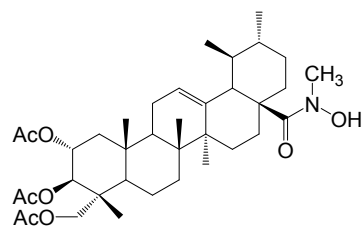


2. NMR data for compound 8

2.1 ¹H-NMR spectrum for compound 8 recorded in CDCl₃

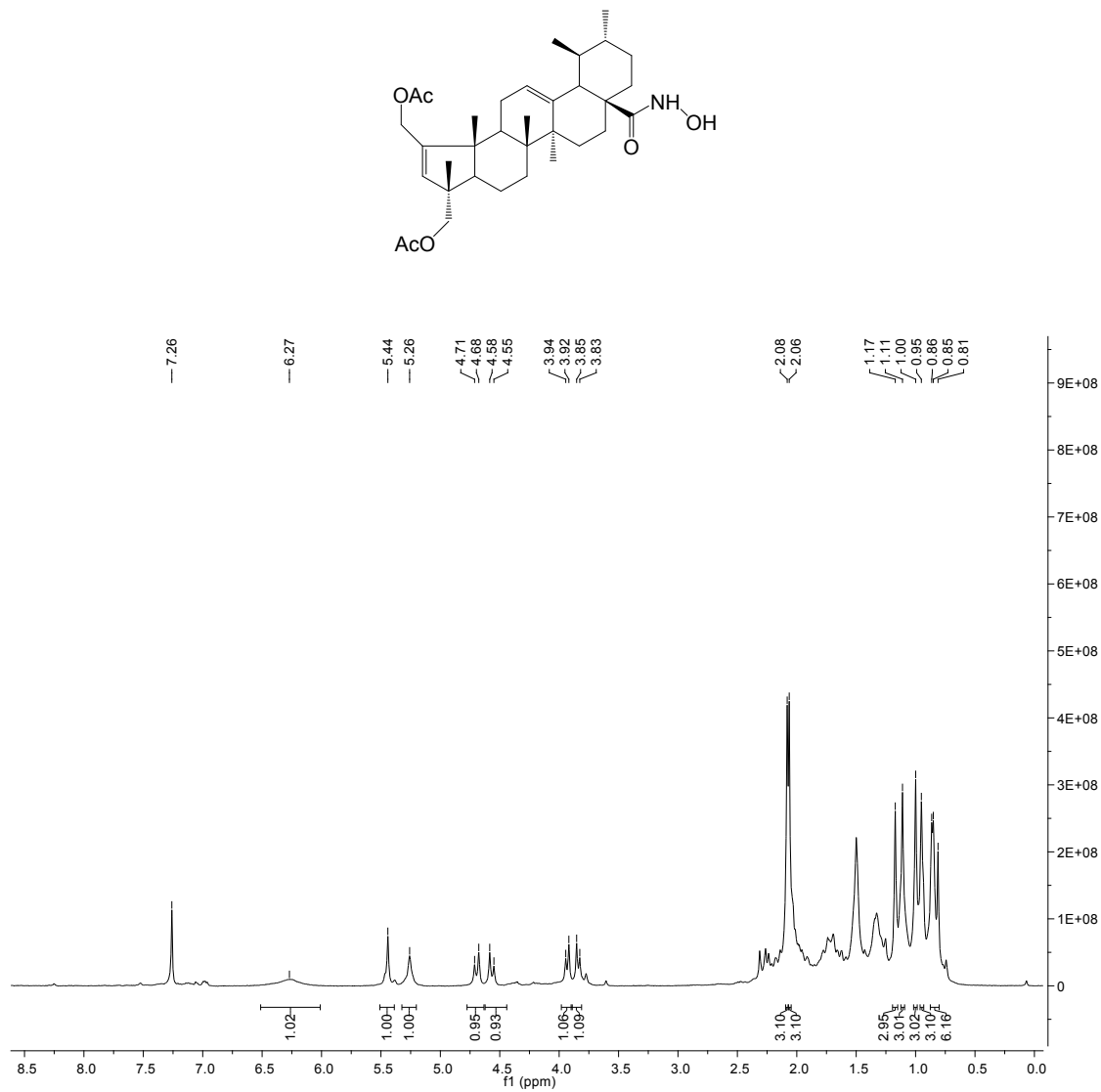


2.2 ^{13}C -NMR spectrum for compound 8 recorded in CDCl_3

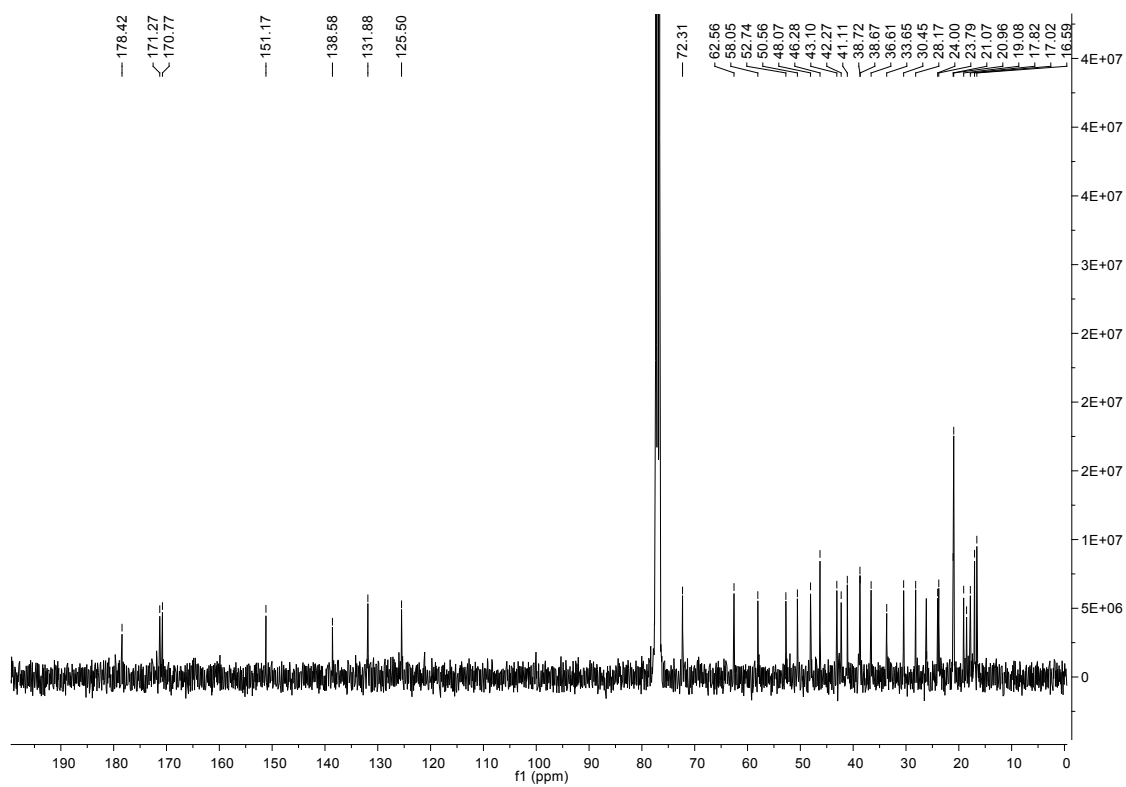
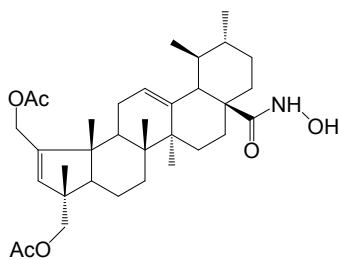


3. NMR data for compound 9

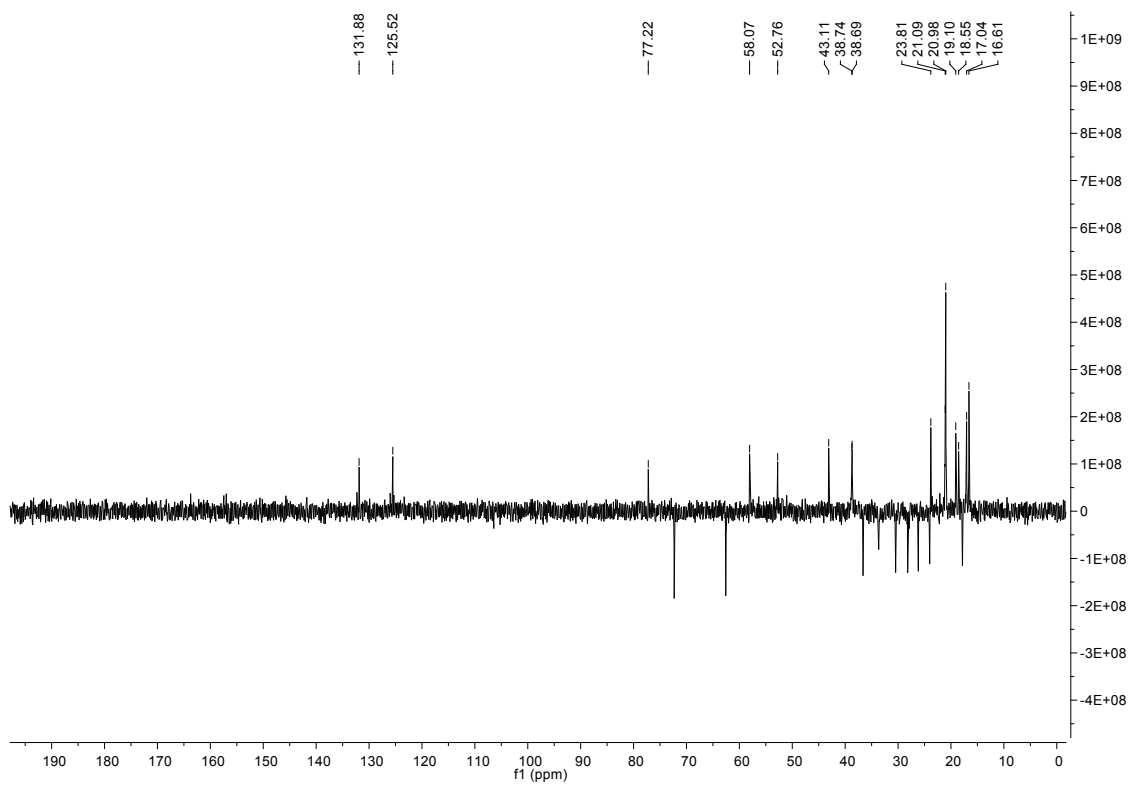
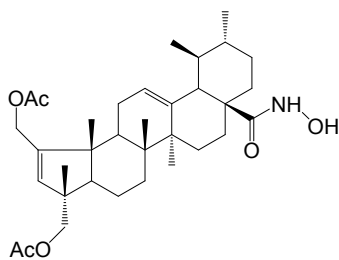
3.1 ¹H-NMR spectrum for compound 9 recorded in CDCl₃



3.2 ^{13}C -NMR spectrum for compound 9 recorded in CDCl_3

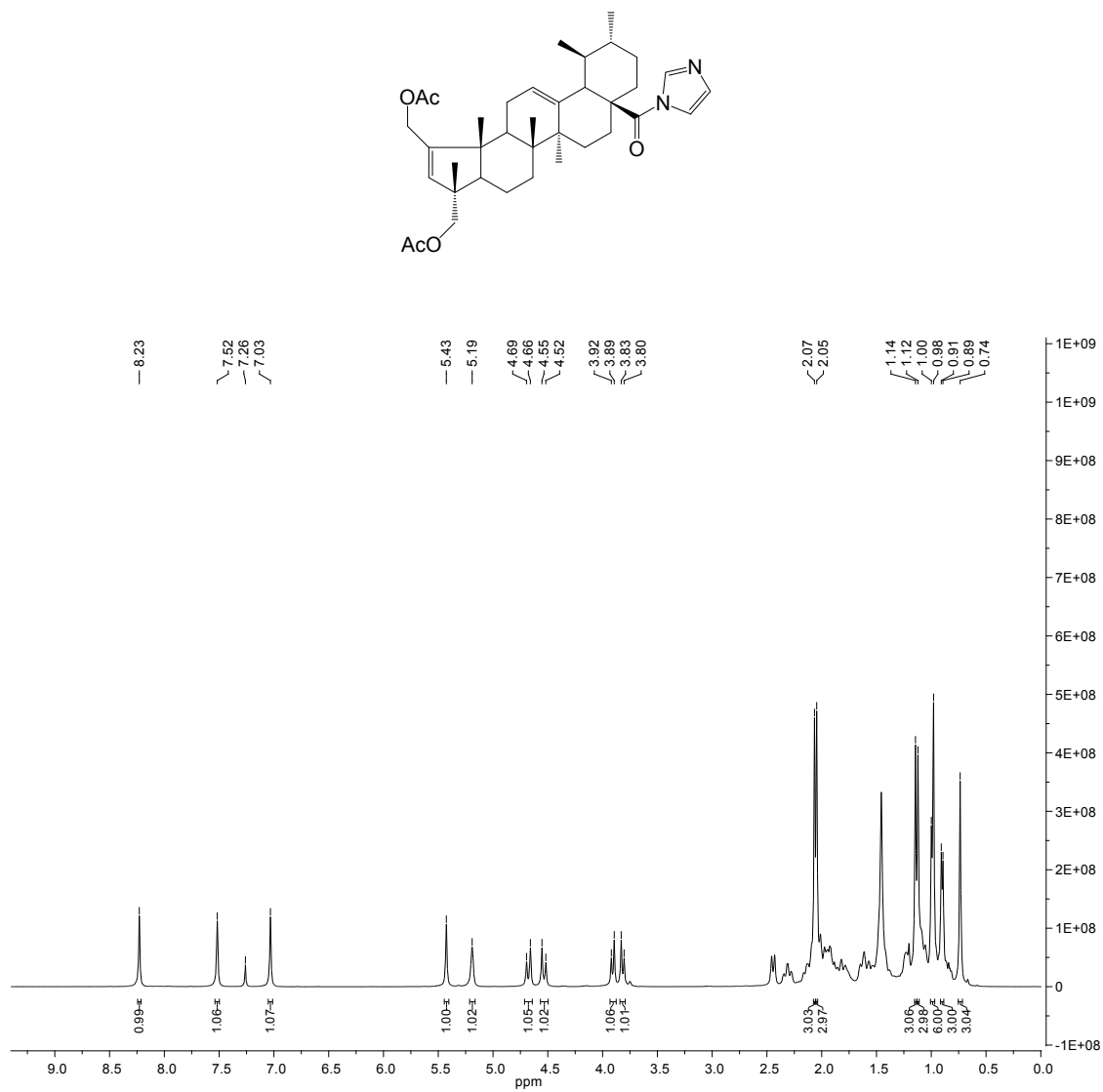


3.3 DEPT135 spectrum for compound 9 recorded in CDCl₃

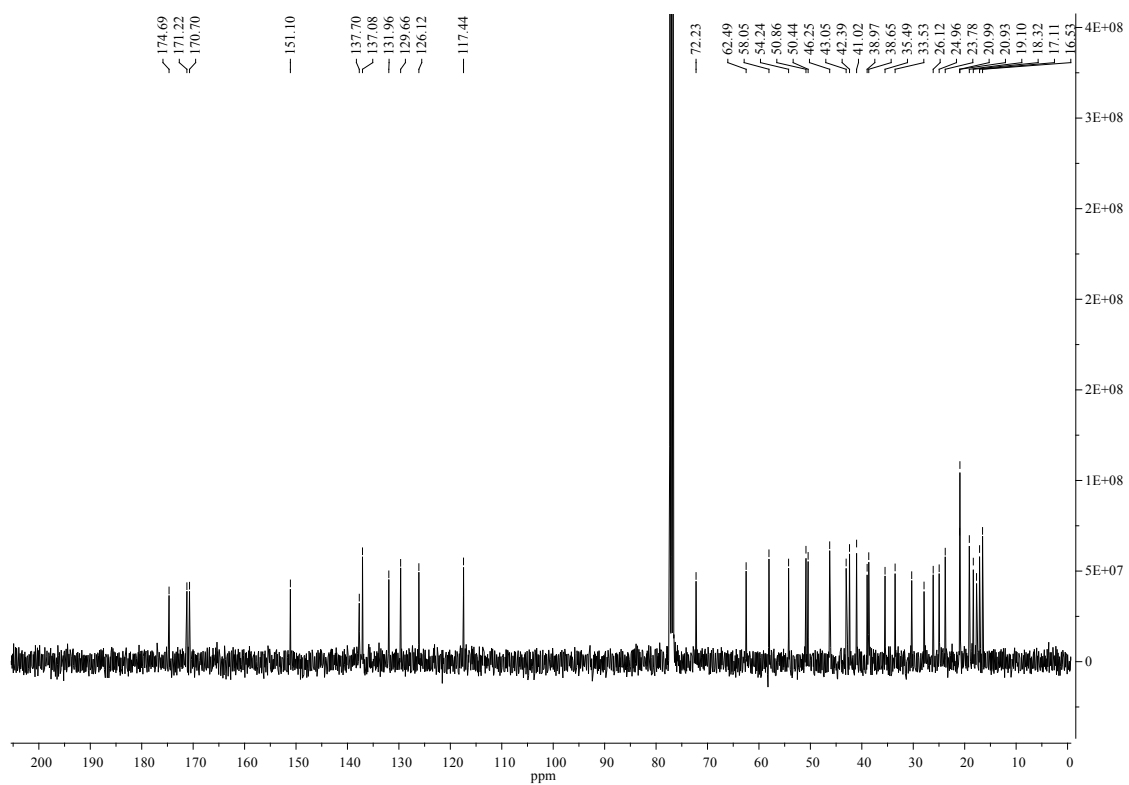
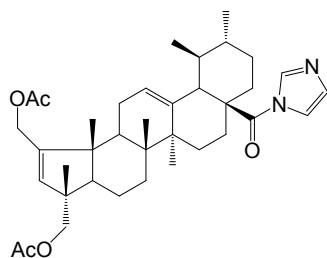


4. NMR data for compound 10

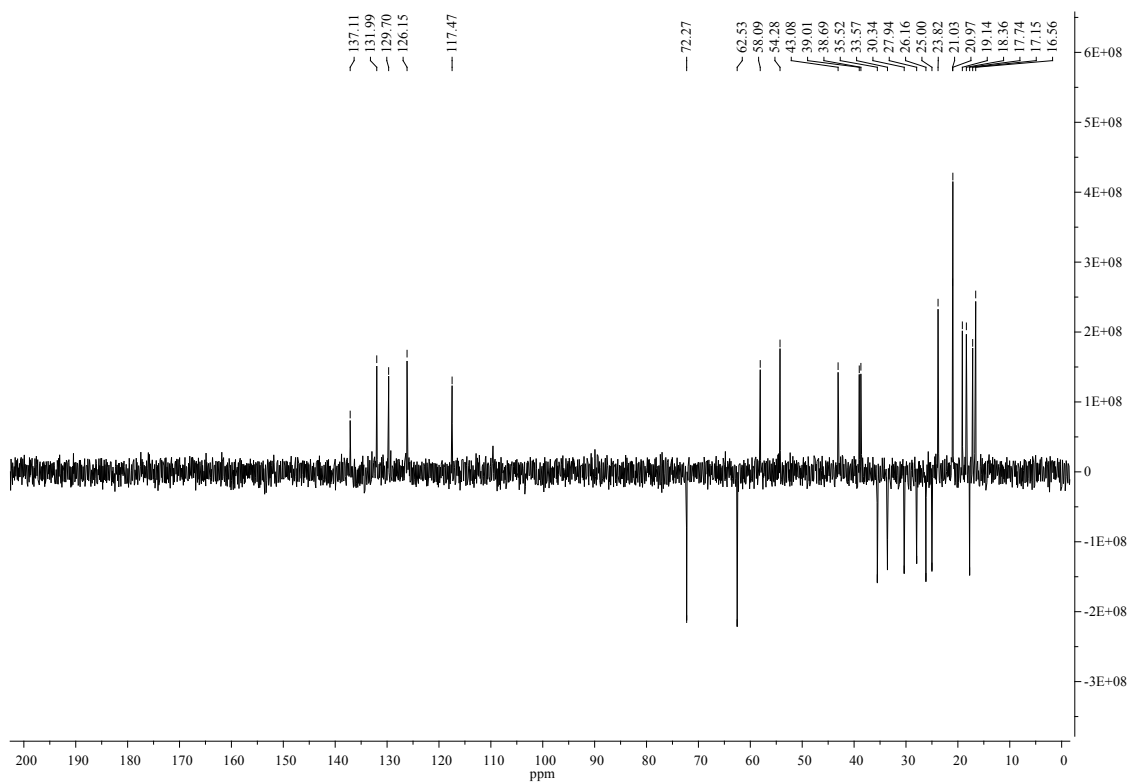
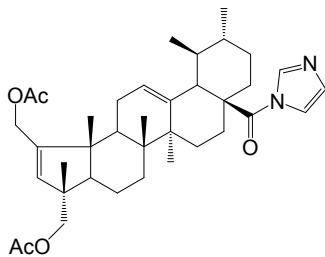
4.1 ¹H-NMR spectrum for compound 10 recorded in CDCl₃



4.2 ^{13}C -NMR spectrum for compound 10 recorded in CDCl_3

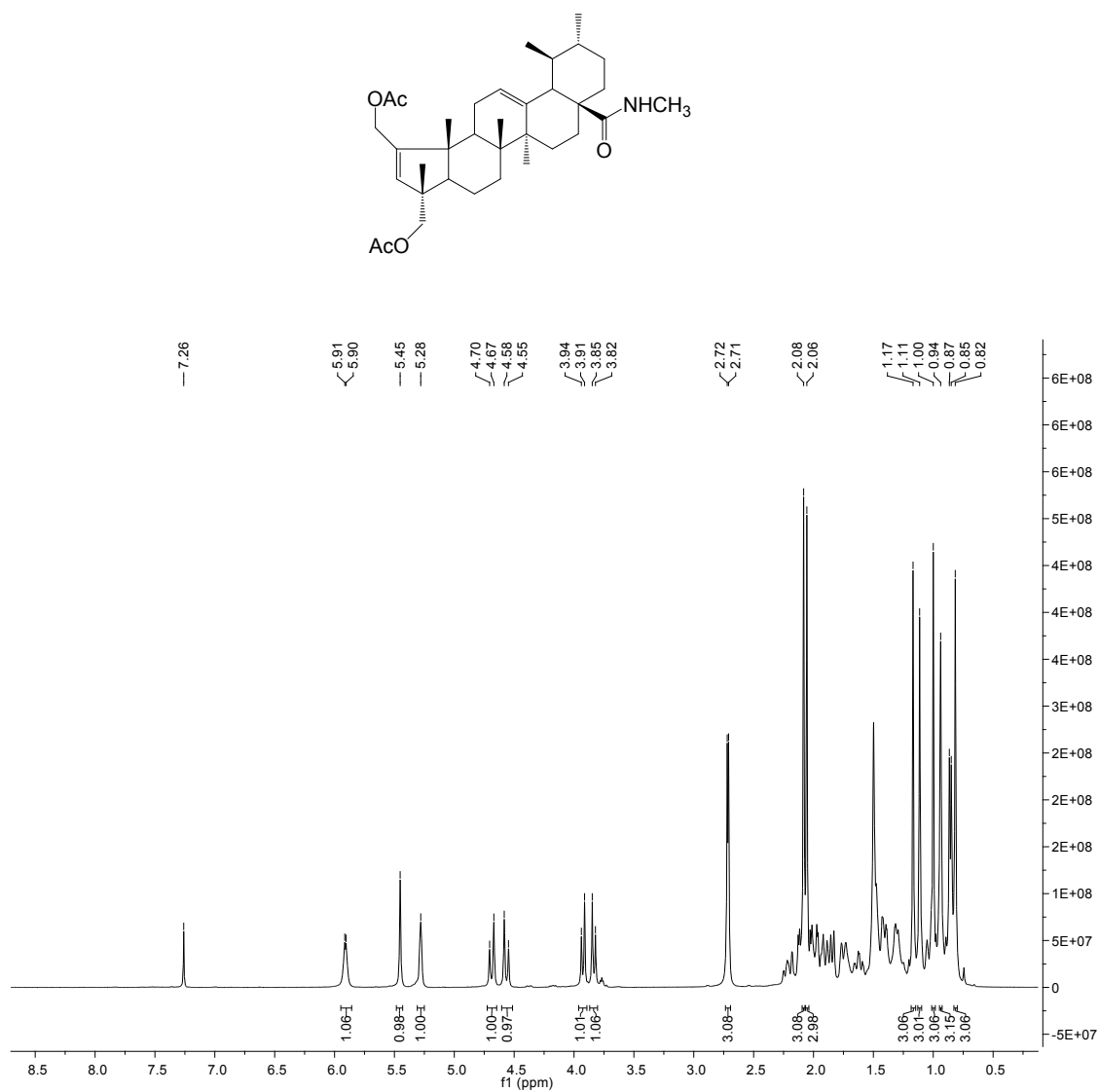


4.3 DEPT135 spectrum for compound 10 recorded in CDCl₃

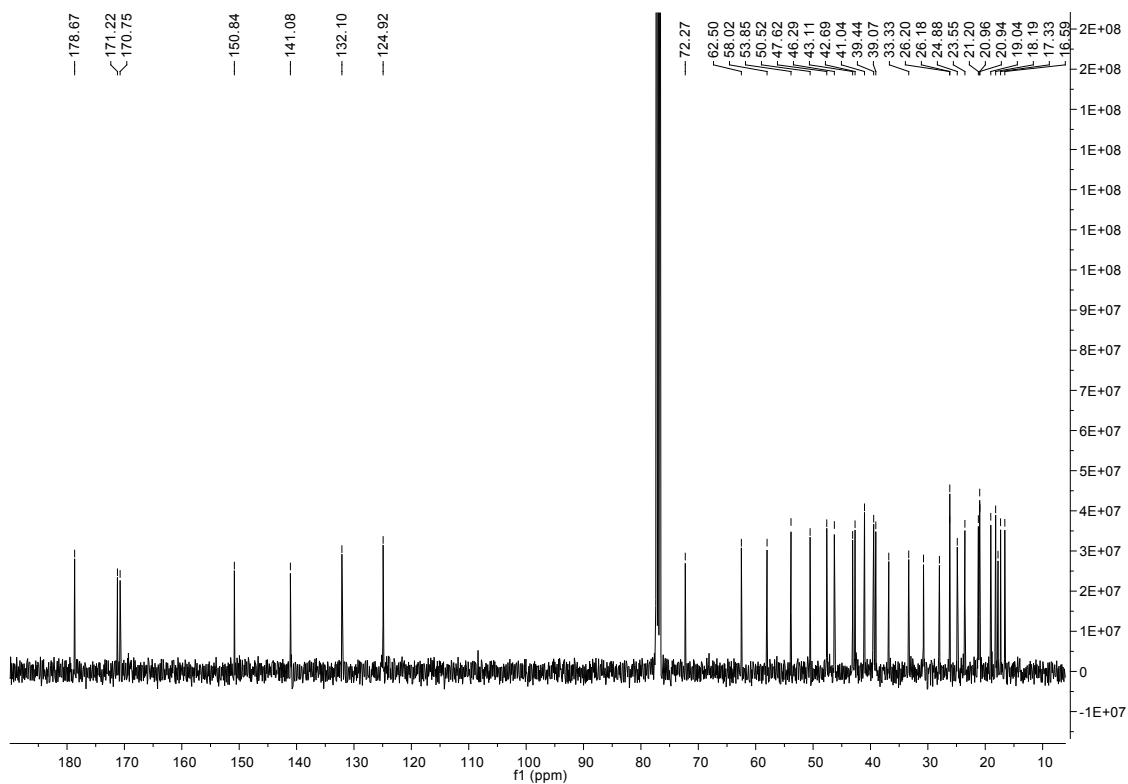
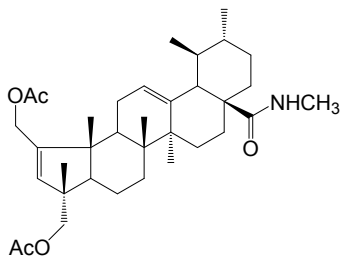


5 NMR data for compound 11:

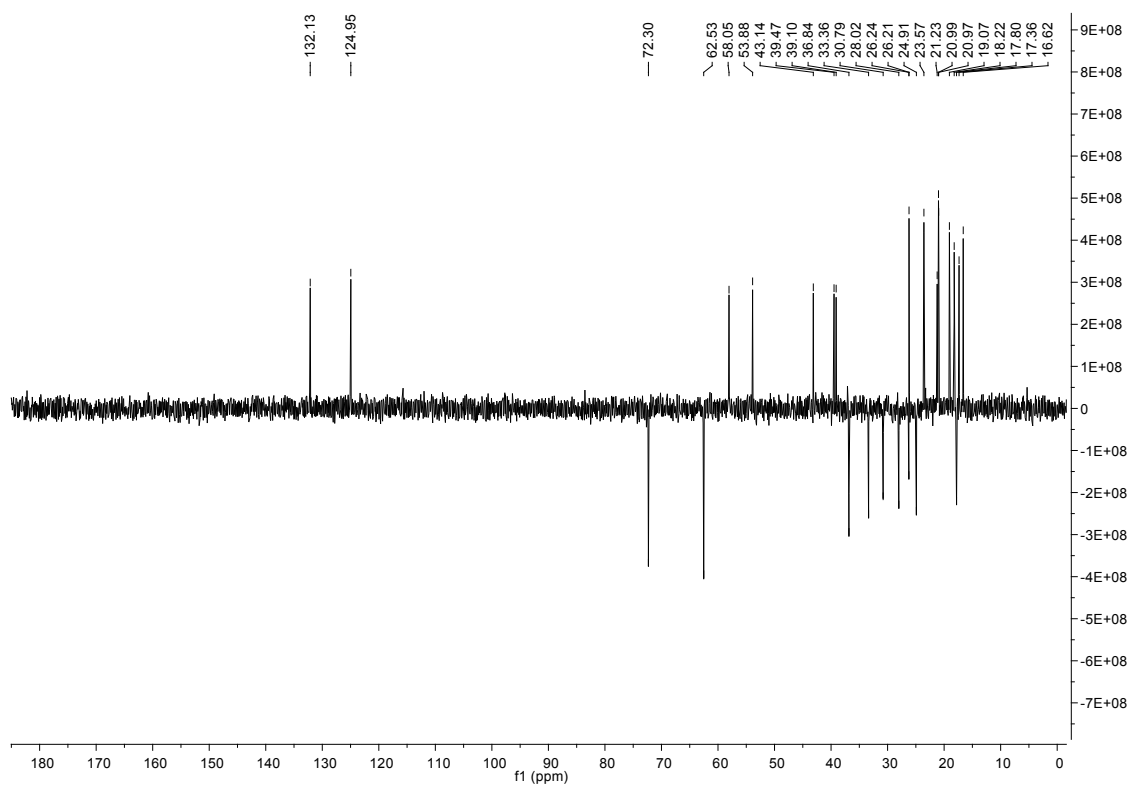
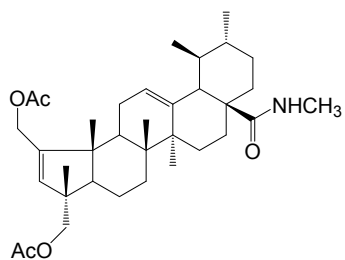
5.1 $^1\text{H-NMR}$ spectrum for compound 11 recorded in CDCl_3



5.2 ^{13}C -NMR spectrum for compound 11 recorded in CDCl_3

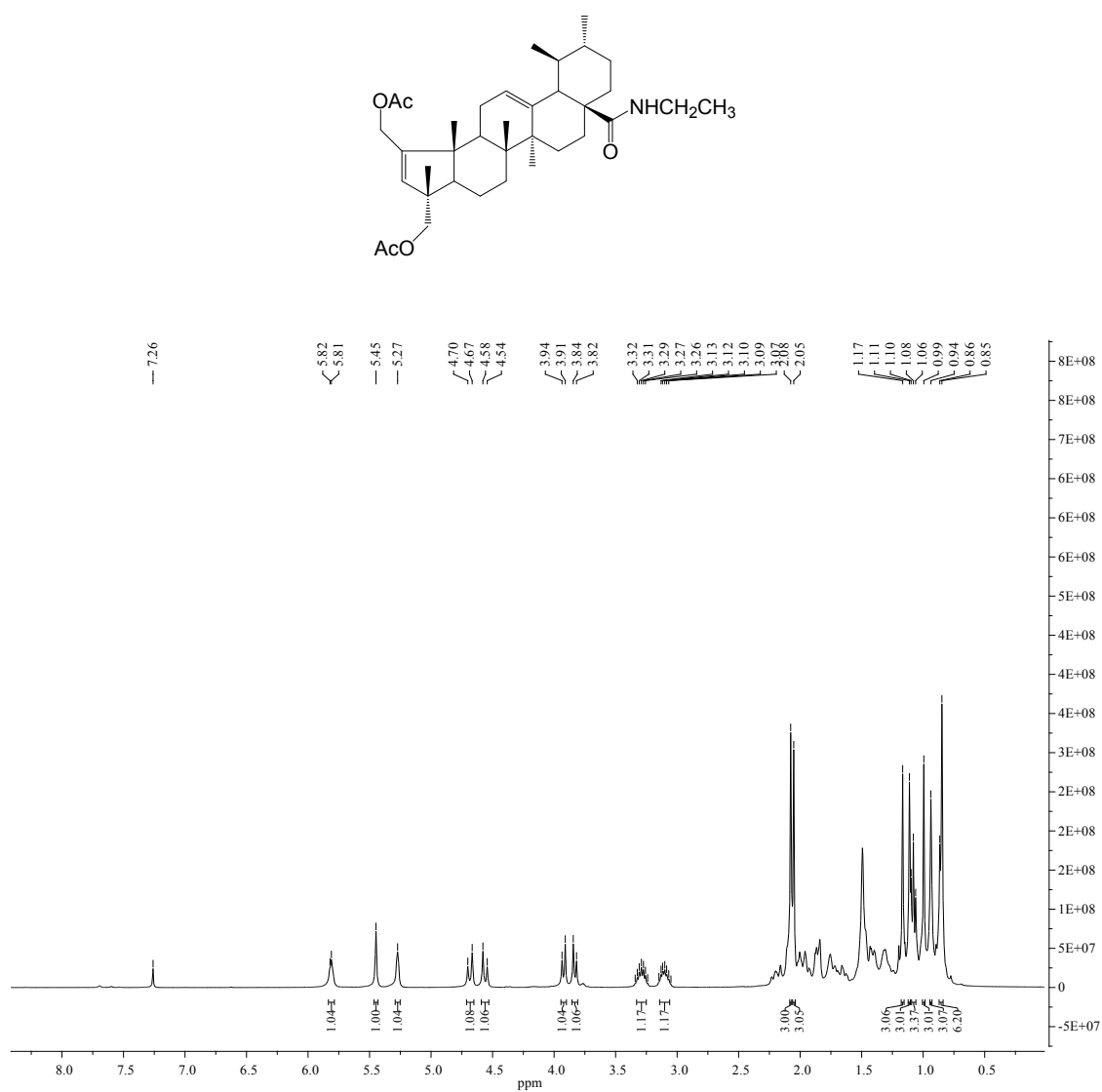


5.3 DEPT135 spectrum for compound 11 recorded in CDCl₃

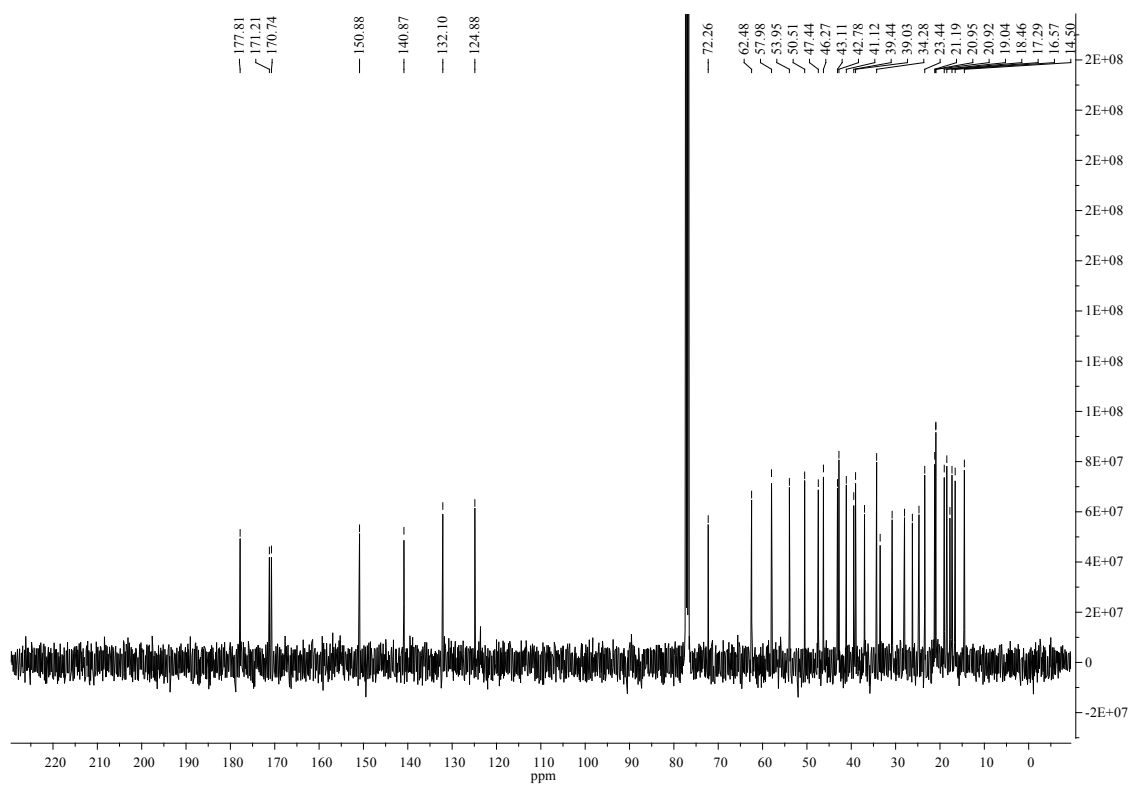
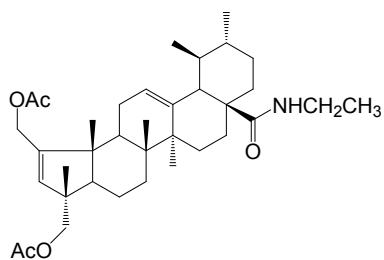


6. NMR data for compound 12

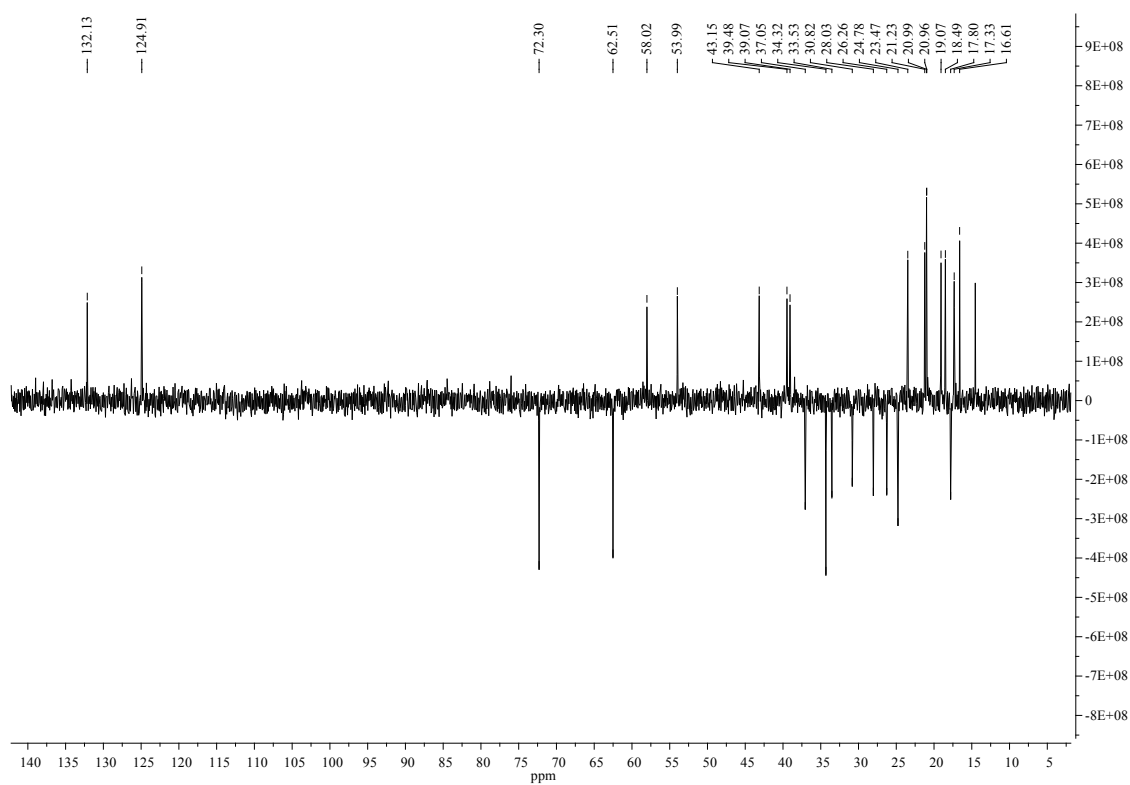
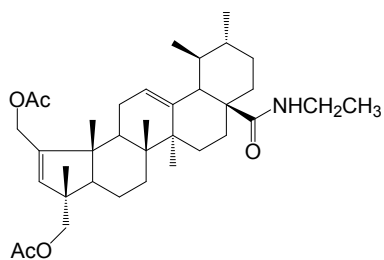
6.1 ¹H-NMR spectrum for compound 12 recorded in CDCl₃



6.2 ^{13}C -NMR spectrum for compound 12 recorded in CDCl_3

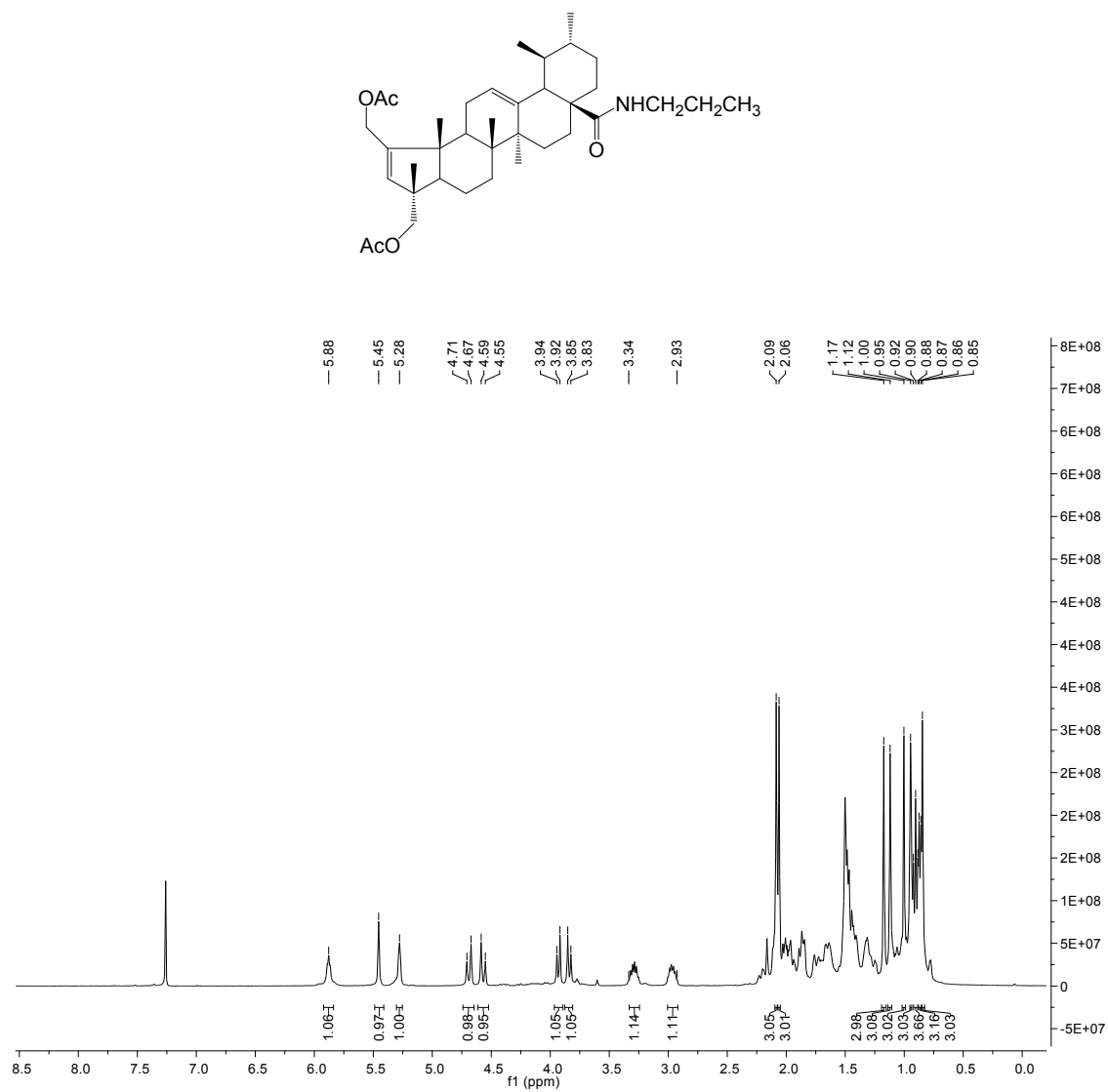


6.3 DEPT135 spectrum for compound 12 recorded in CDCl₃

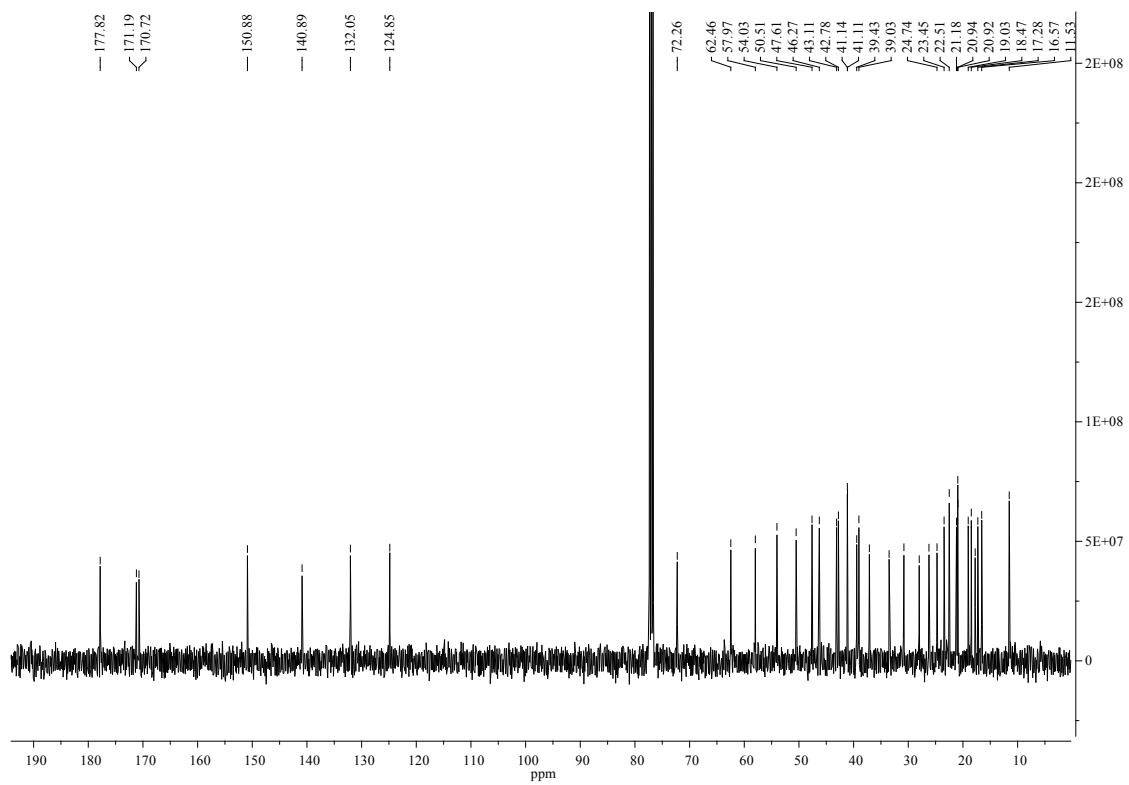
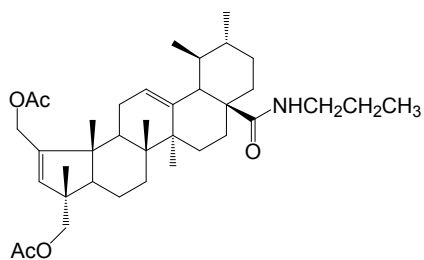


7. NMR data for compound 13

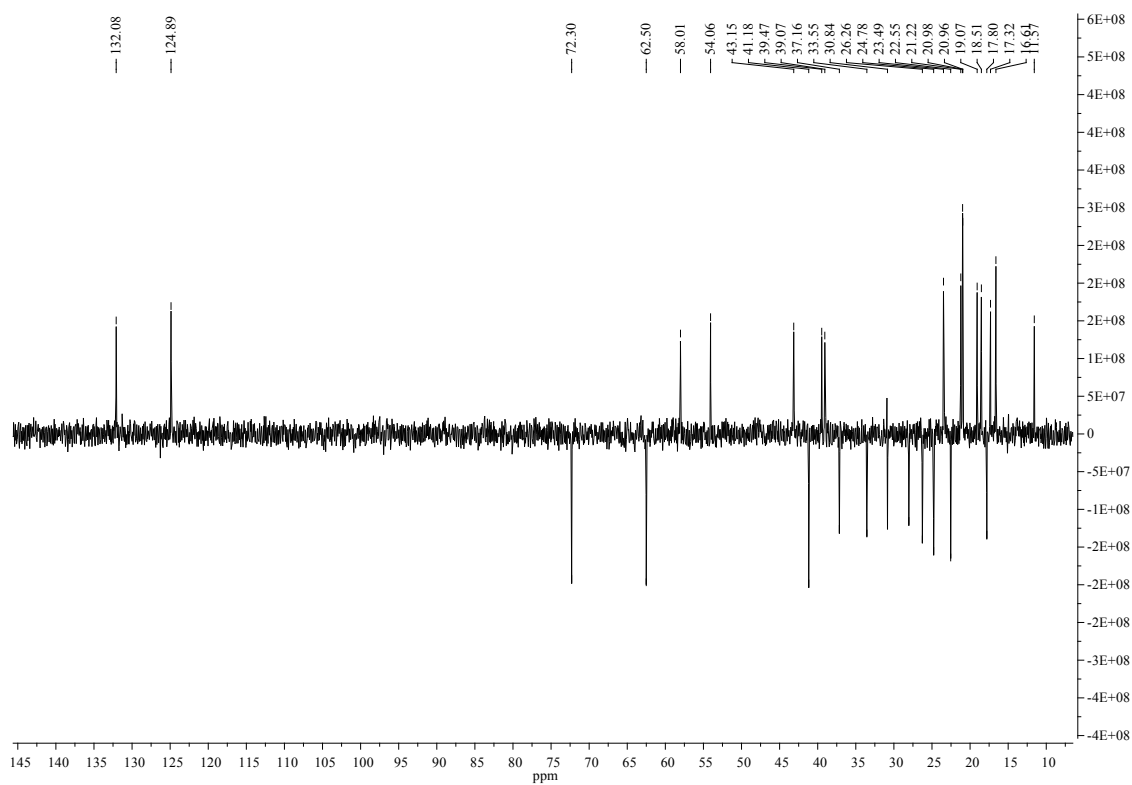
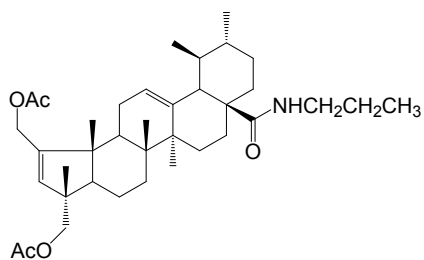
7.1 ¹H-NMR spectrum for compound 13 recorded in CDCl₃



7.2 ^{13}C -NMR spectrum for compound 13 recorded in CDCl_3

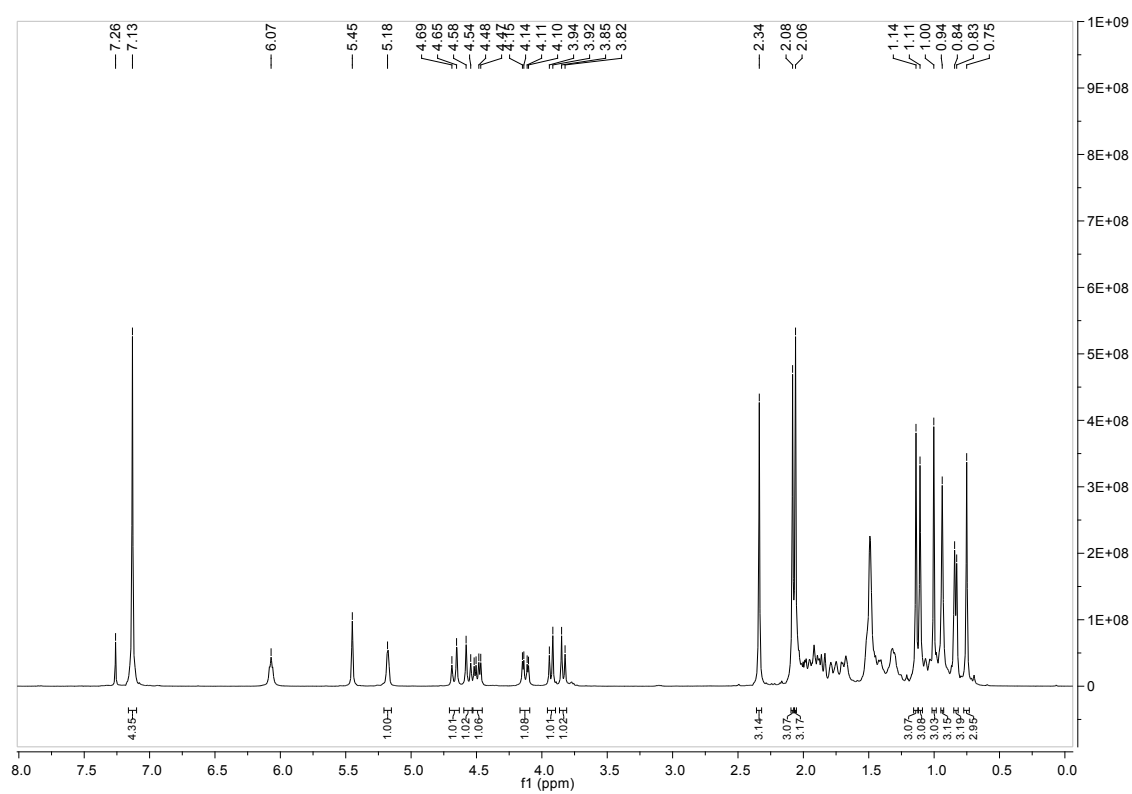
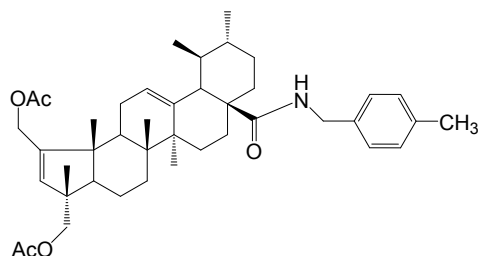


7.3 DEPT135 spectrum for compound 13 recorded in CDCl₃

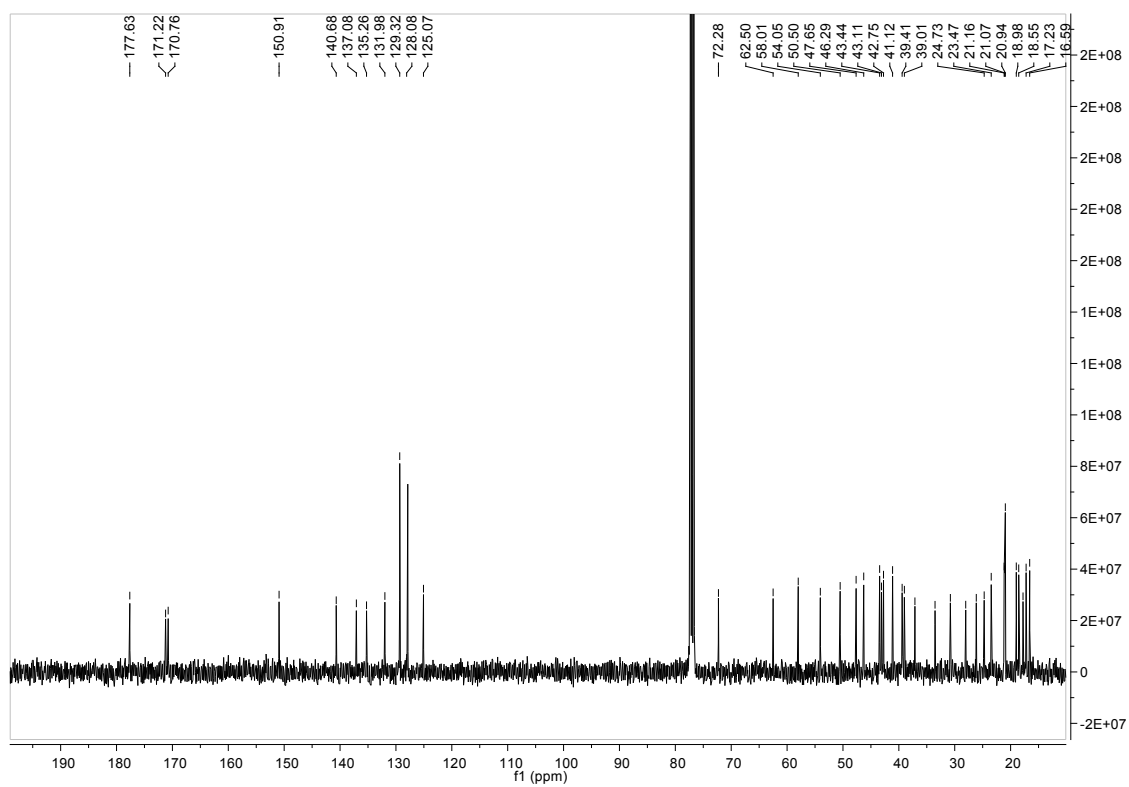
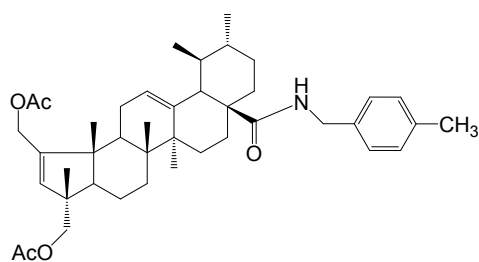


8. NMR data for compound 14

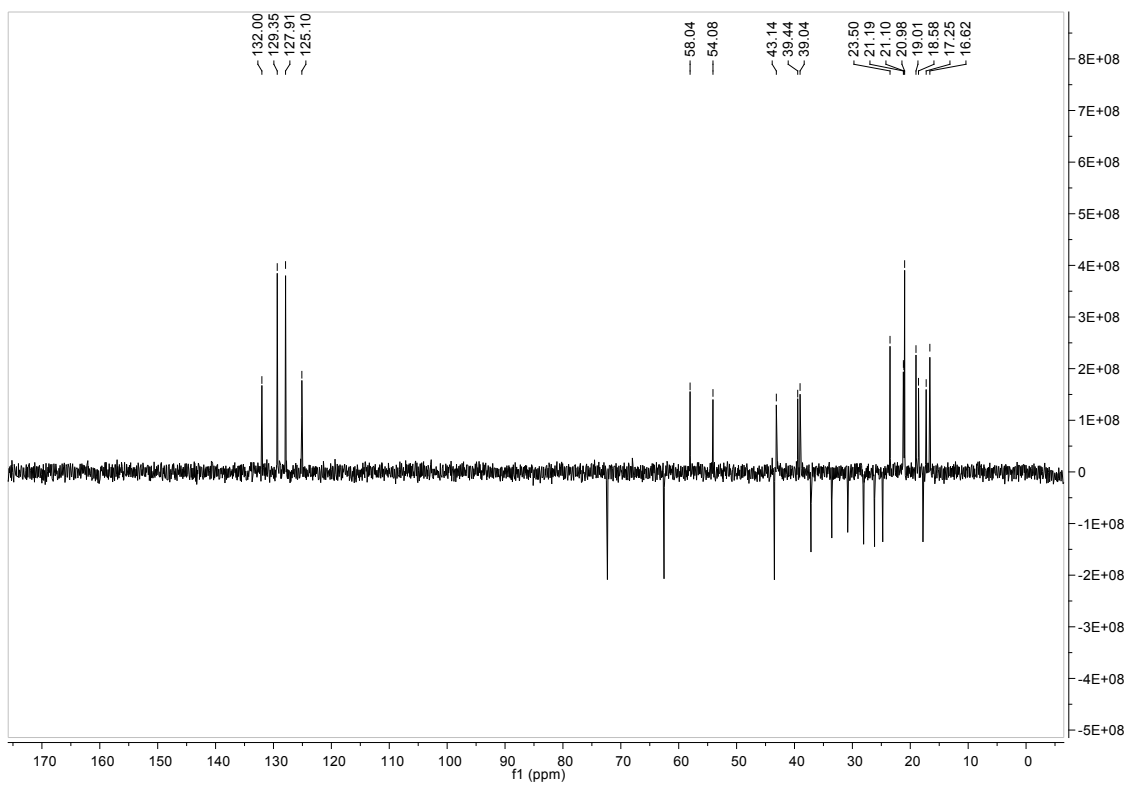
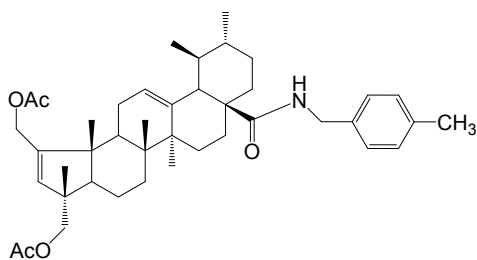
8.1 ¹H-NMR spectrum for compound 14 recorded in CDCl₃



8.2 ^{13}C -NMR spectrum for compound 14 recorded in CDCl_3

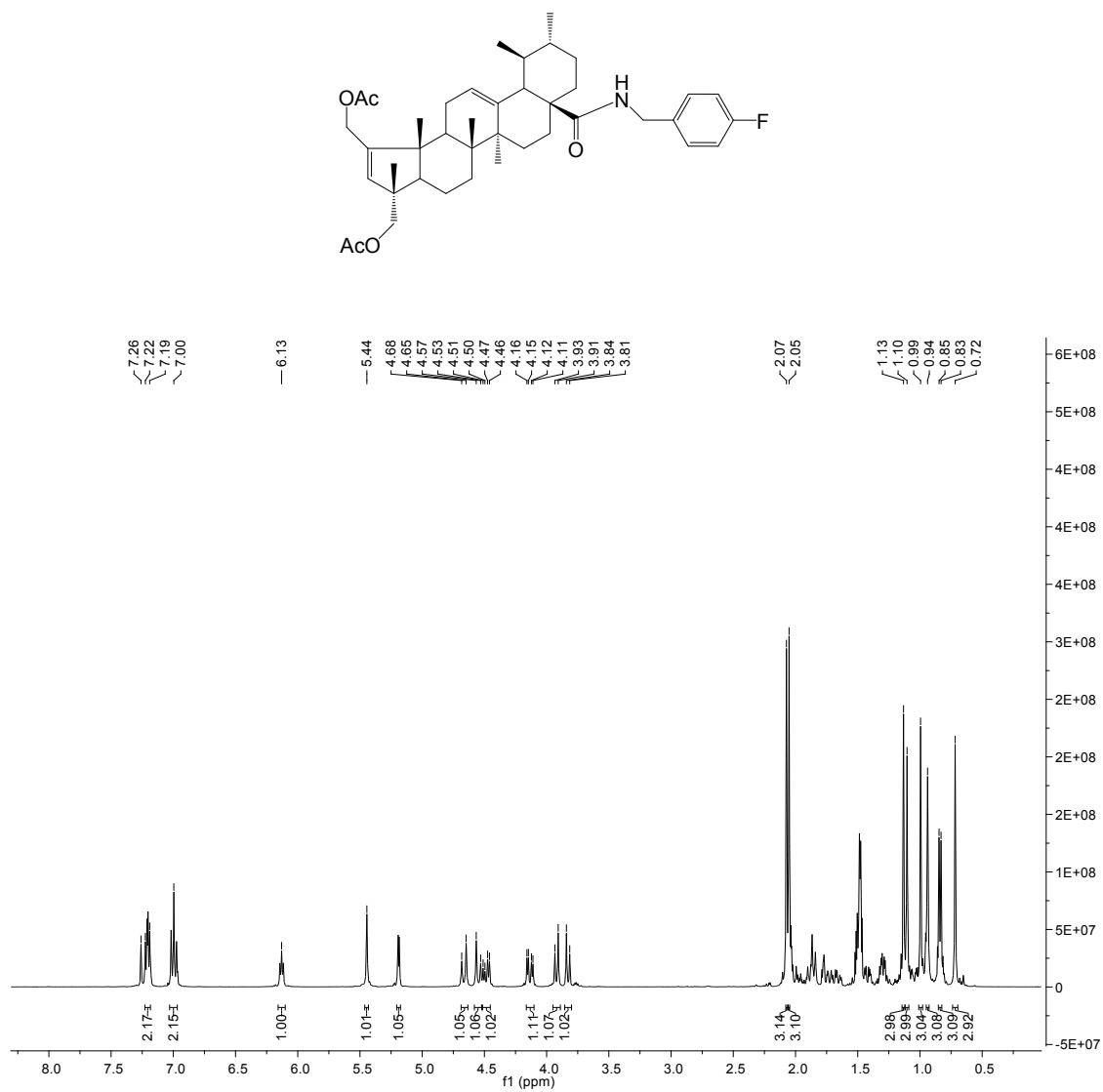


8.3 DEPT135 spectrum for compound 14 recorded in CDCl₃

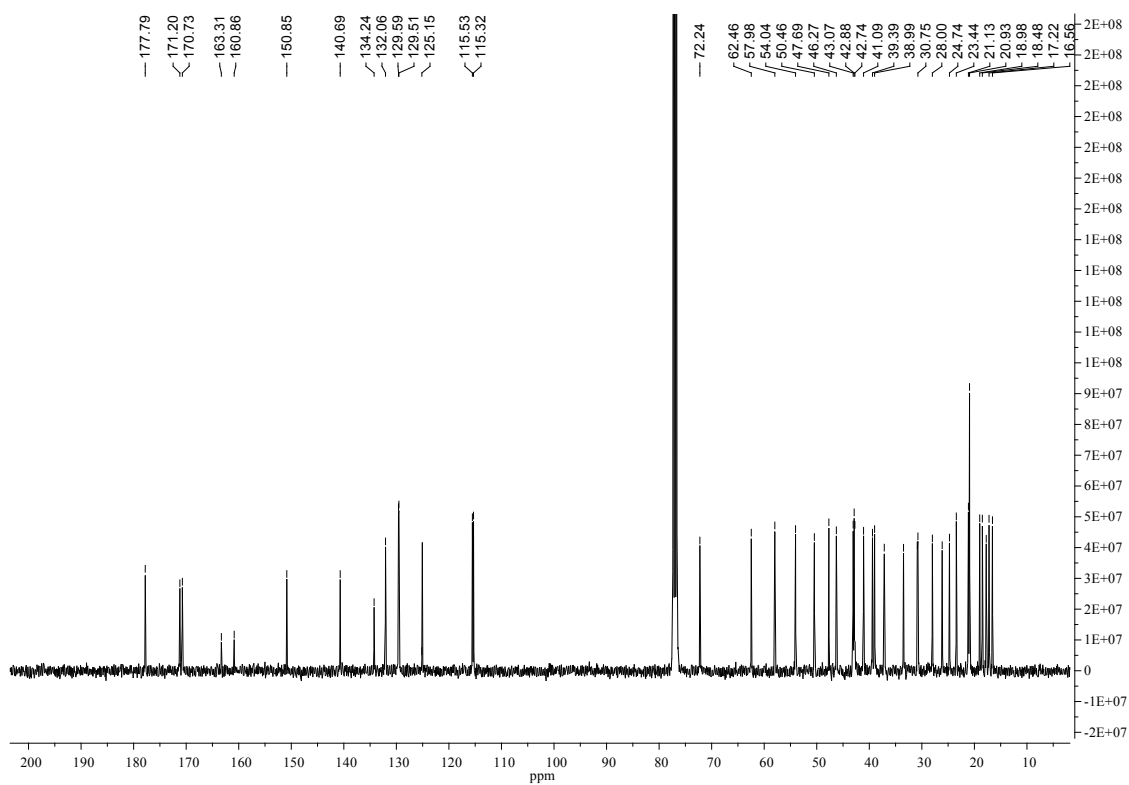
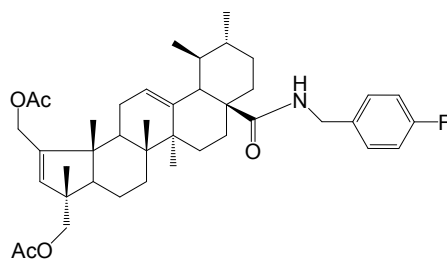


9. NMR data for compound 15

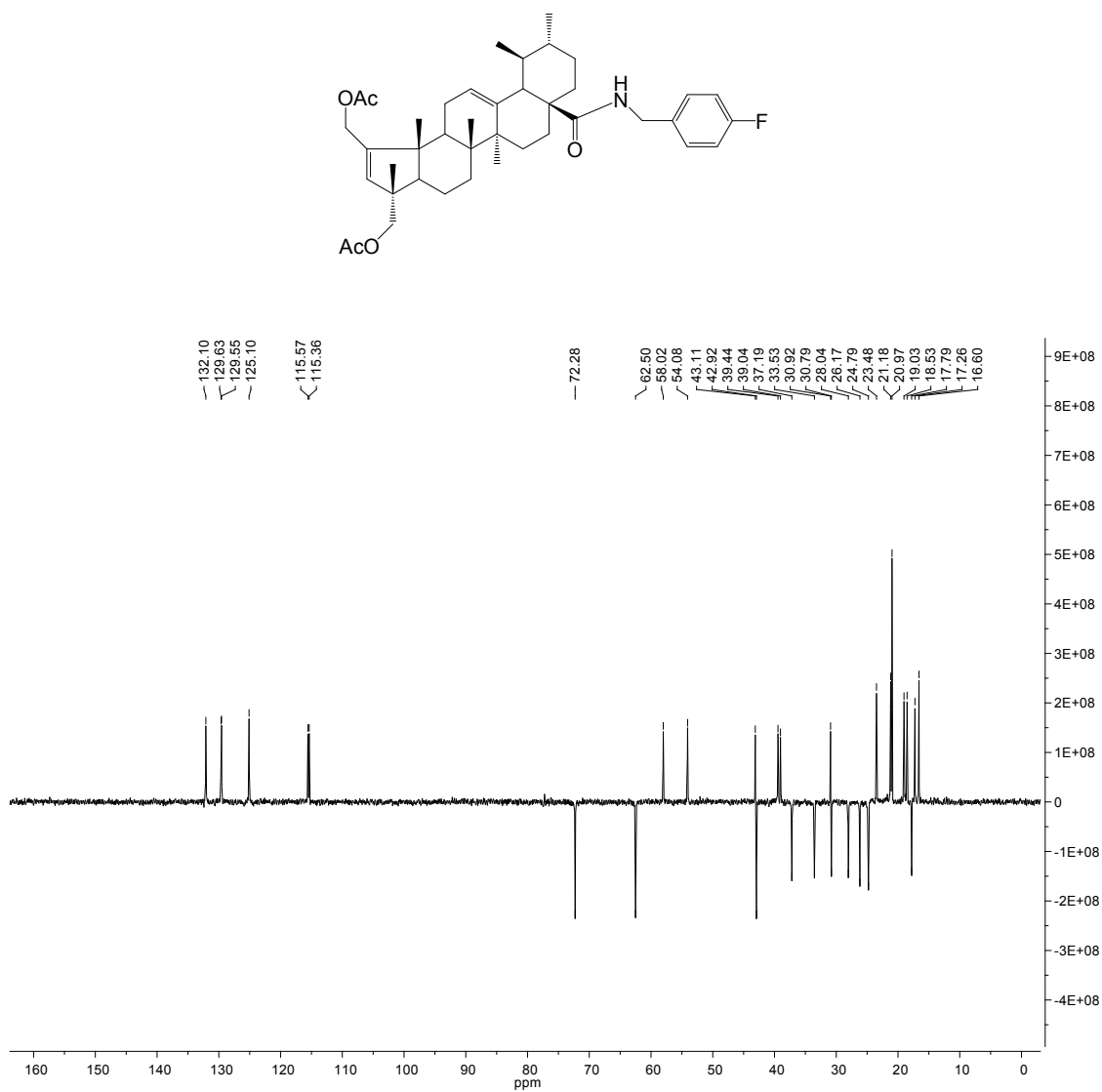
9.1 $^1\text{H-NMR}$ spectrum for compound 15 recorded in CDCl_3



9.2 ^{13}C -NMR spectrum for compound 15 recorded in CDCl_3

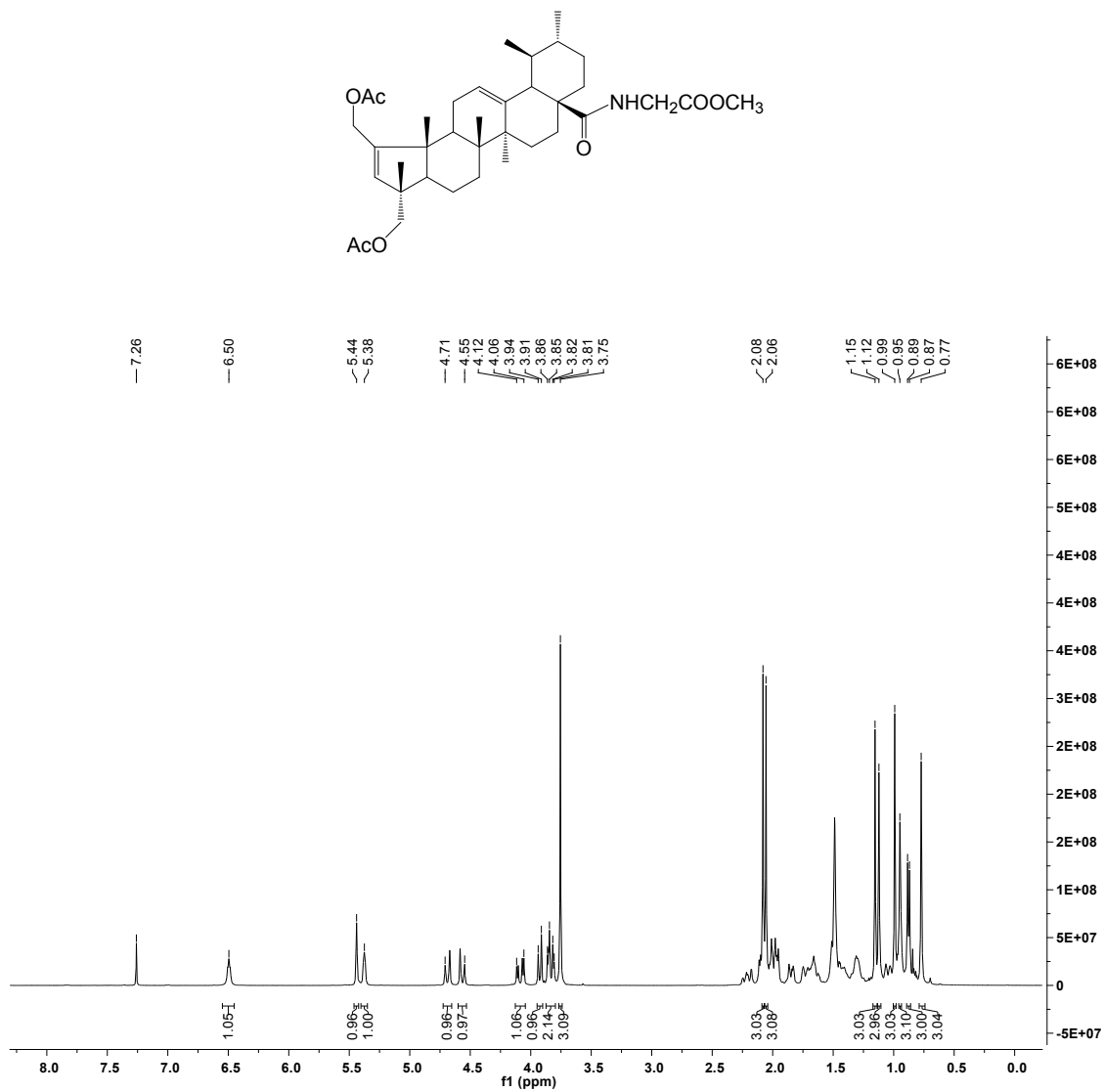


9.3 DEPT135 spectrum for compound 15 recorded in CDCl₃

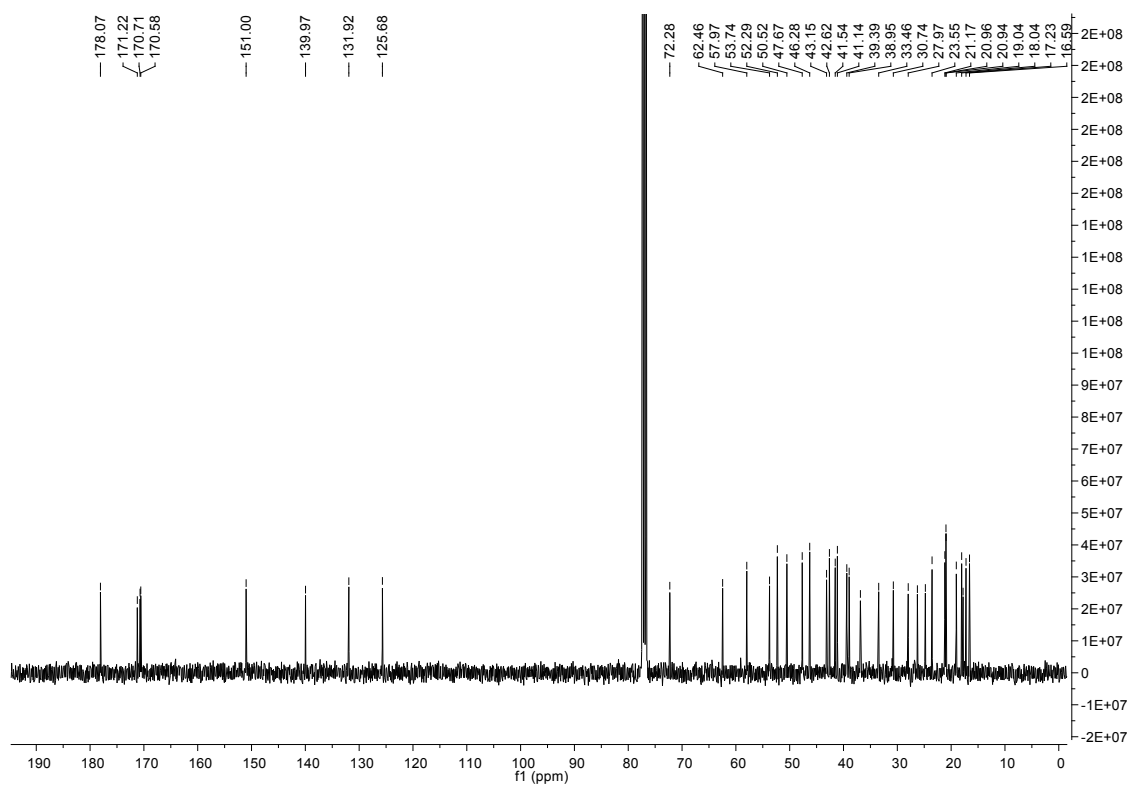
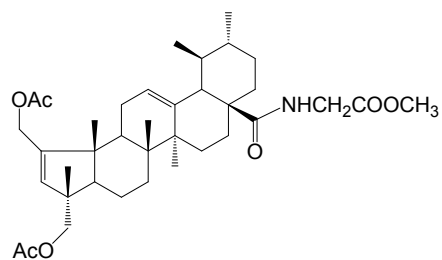


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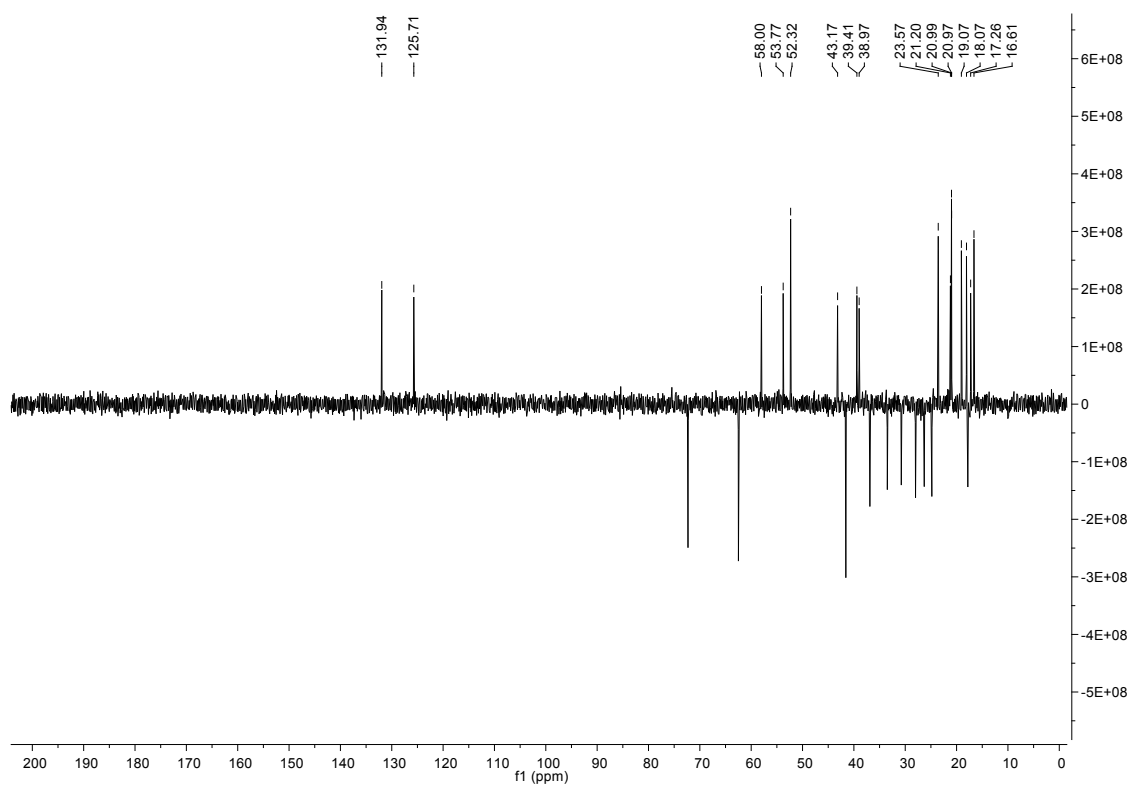
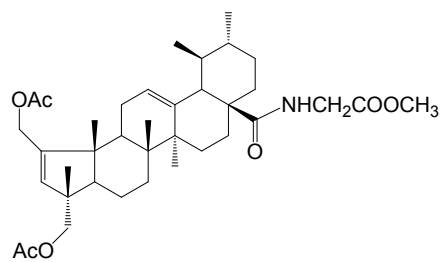
10.1 ^1H -NMR spectrum for compound 16 recorded in CDCl_3



10.2 ^{13}C -NMR spectrum for compound 16 recorded in CDCl_3

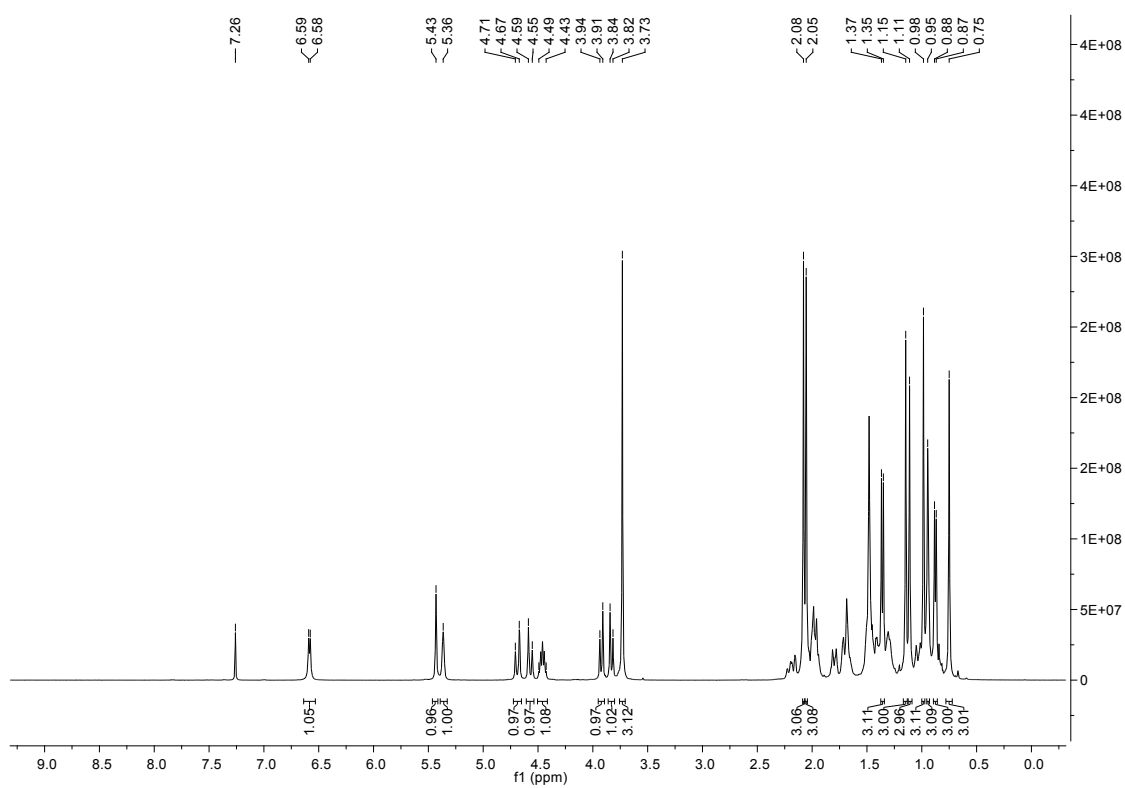
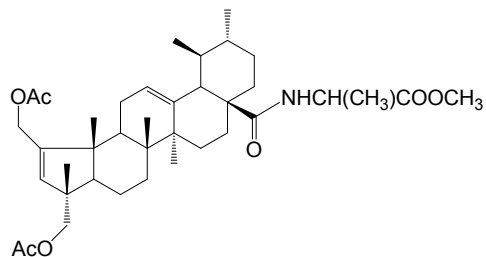


10.3 DEPT135 spectrum for compound 16 recorded in CDCl₃

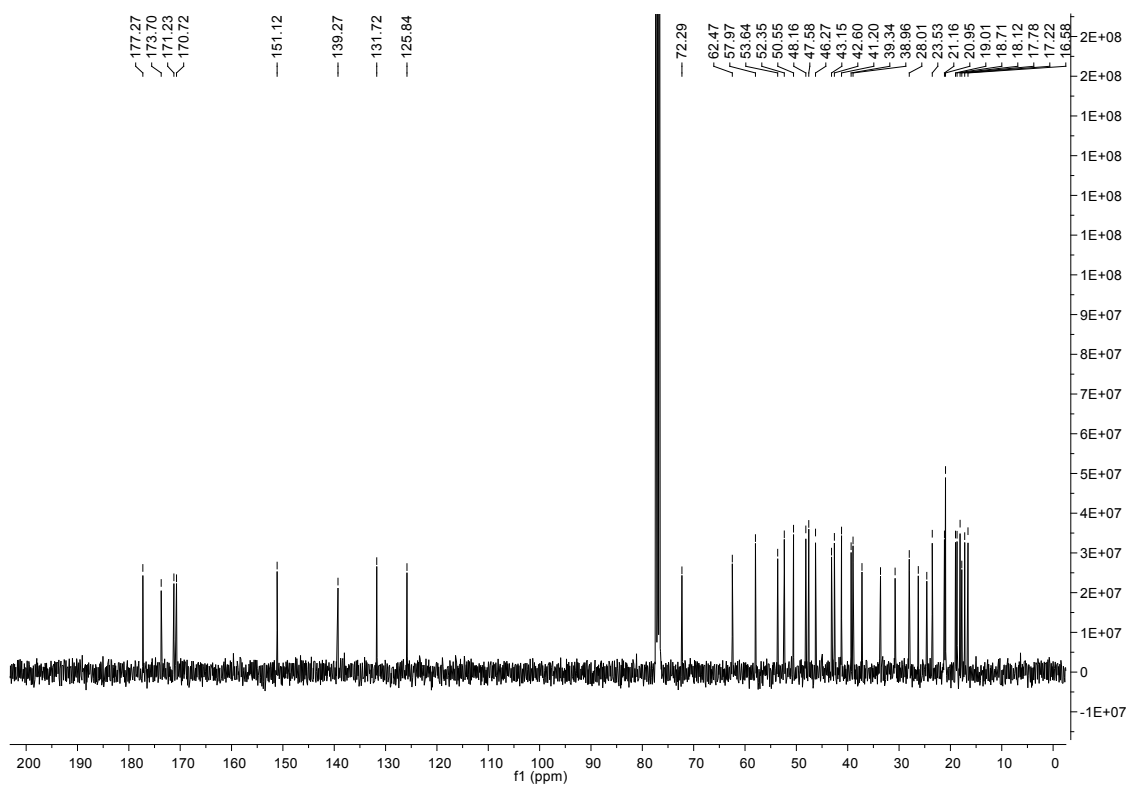
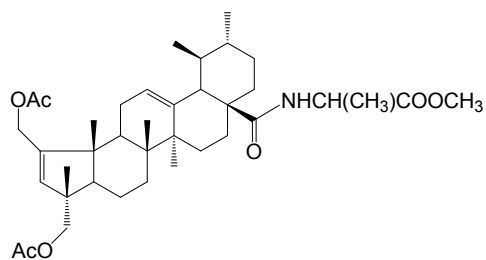


11. NMR data for compound 17

11.1 ¹H-NMR spectrum for compound 17 recorded in CDCl₃



11.2 ^{13}C -NMR spectrum for compound 17 recorded in CDCl_3



11.3 DEPT135 spectrum for compound 17 recorded in CDCl₃

