

## Supporting Information

### Synthesis and bioactivities evaluation of oleanolic acid oxime ester derivatives as $\alpha$ -glucosidase and $\alpha$ -amylase inhibitors

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1. NMR of compounds.....2-21
2. ESI-MS of compounds.....22-31

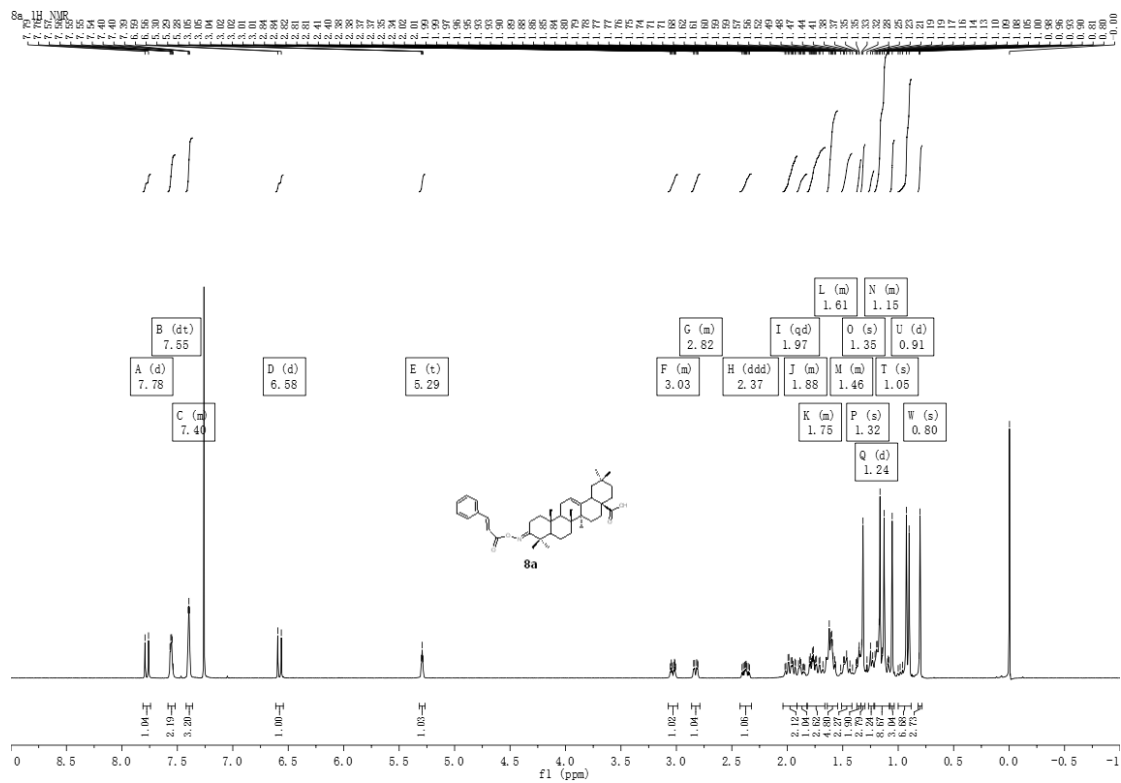


Fig.1 3a (<sup>1</sup>H NMR)

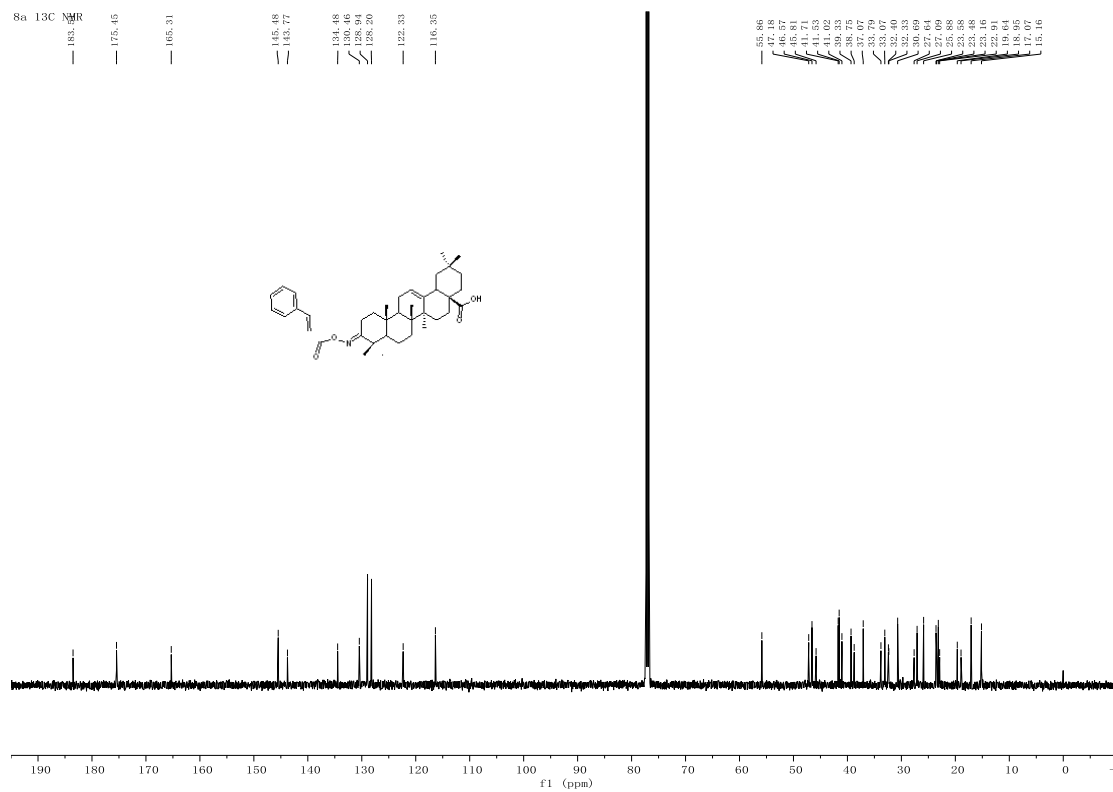


Fig.2 3a (<sup>13</sup>C NMR)

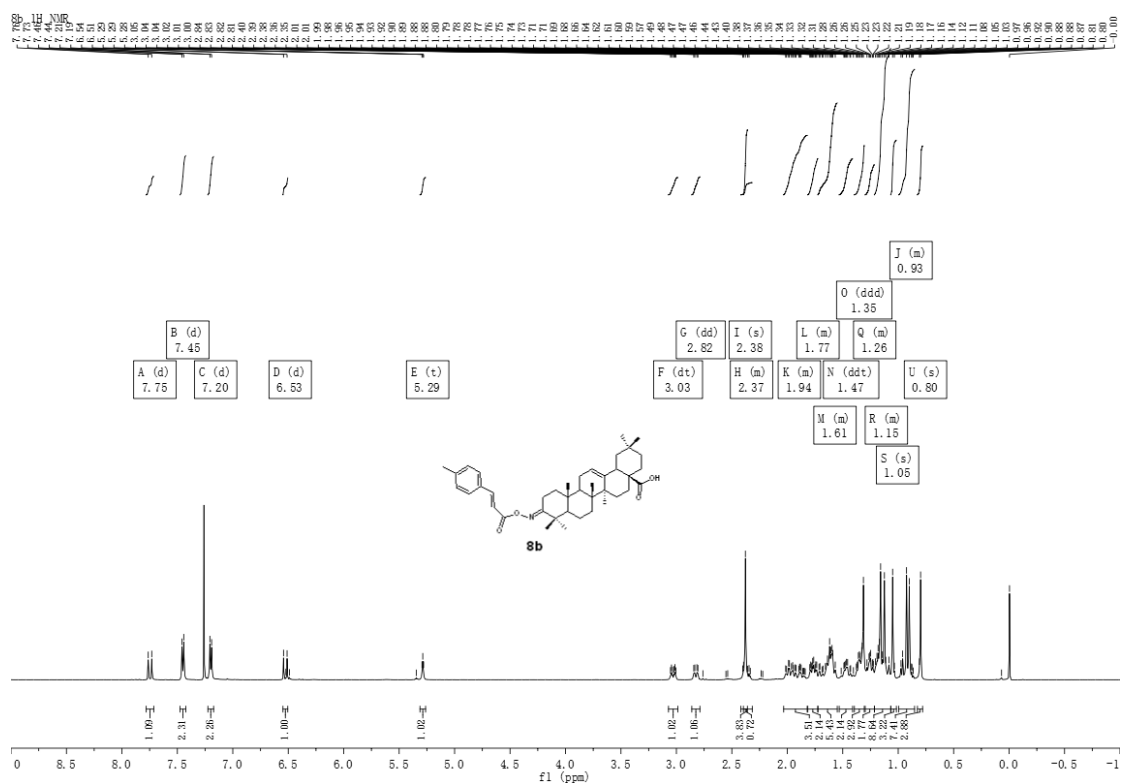


Fig.3 **3b** ( $^1\text{H}$  NMR)

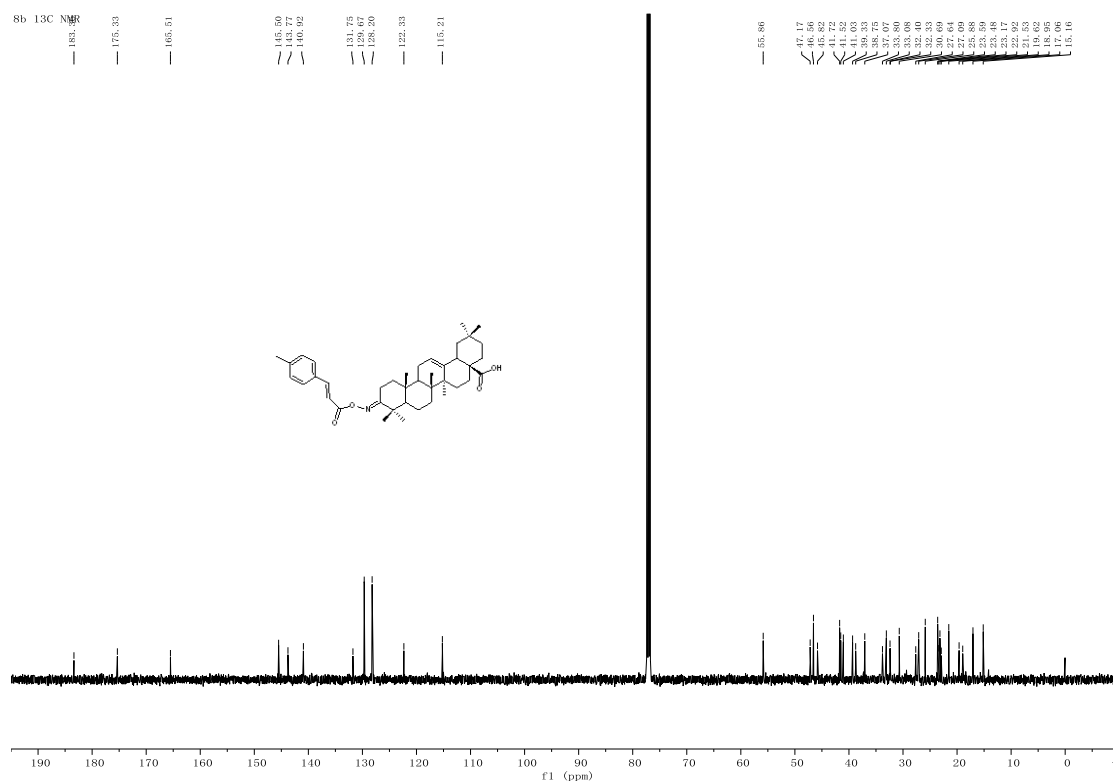


Fig.4 **3b** ( $^{13}\text{C}$  NMR)

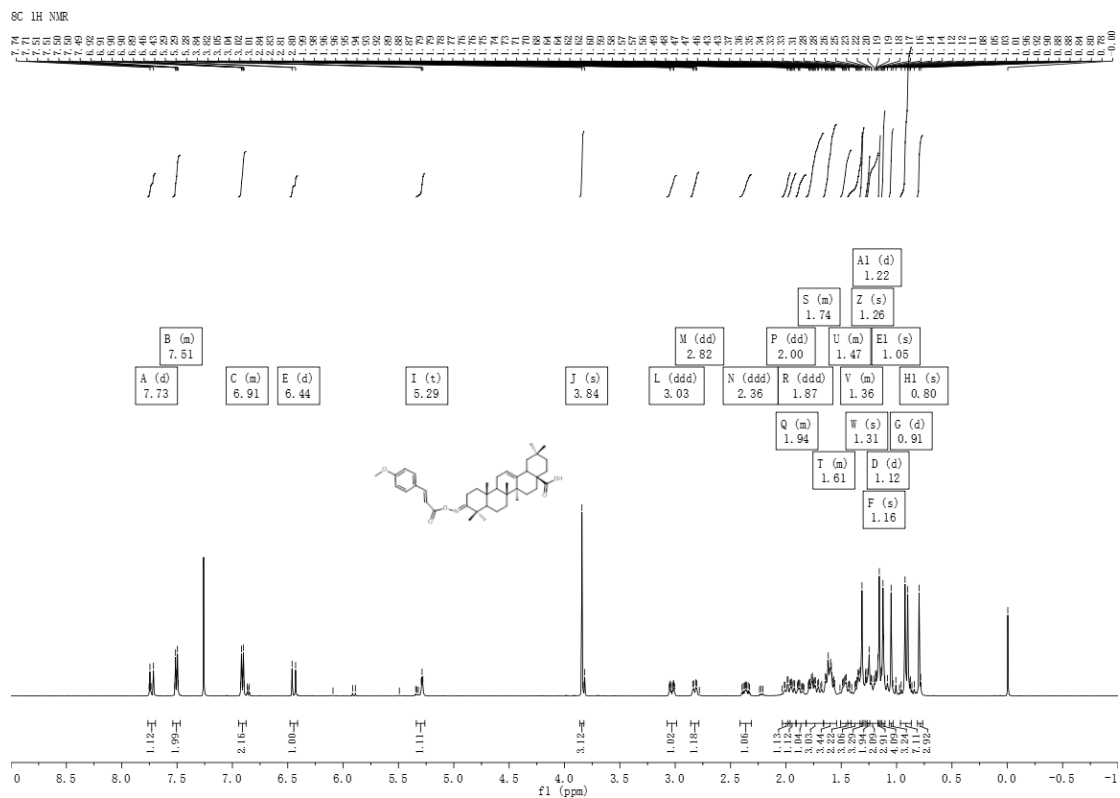


Fig.5 3c (<sup>1</sup>H NMR)

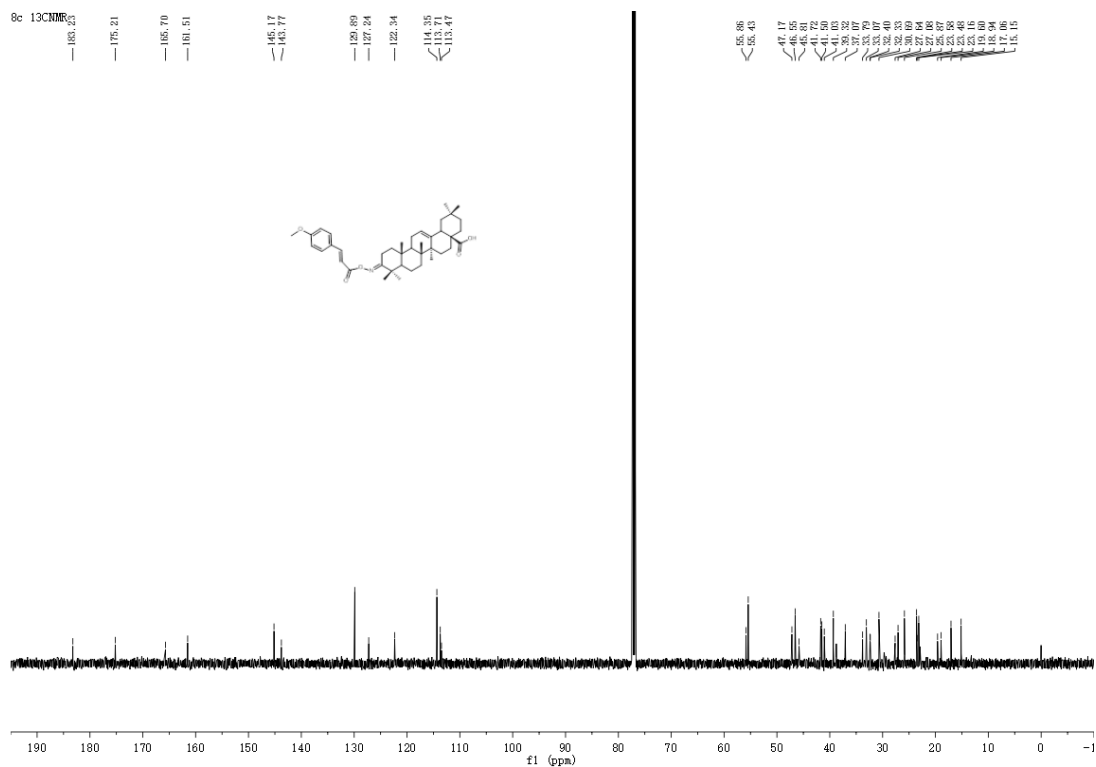


Fig.6 3c (<sup>13</sup>C NMR)



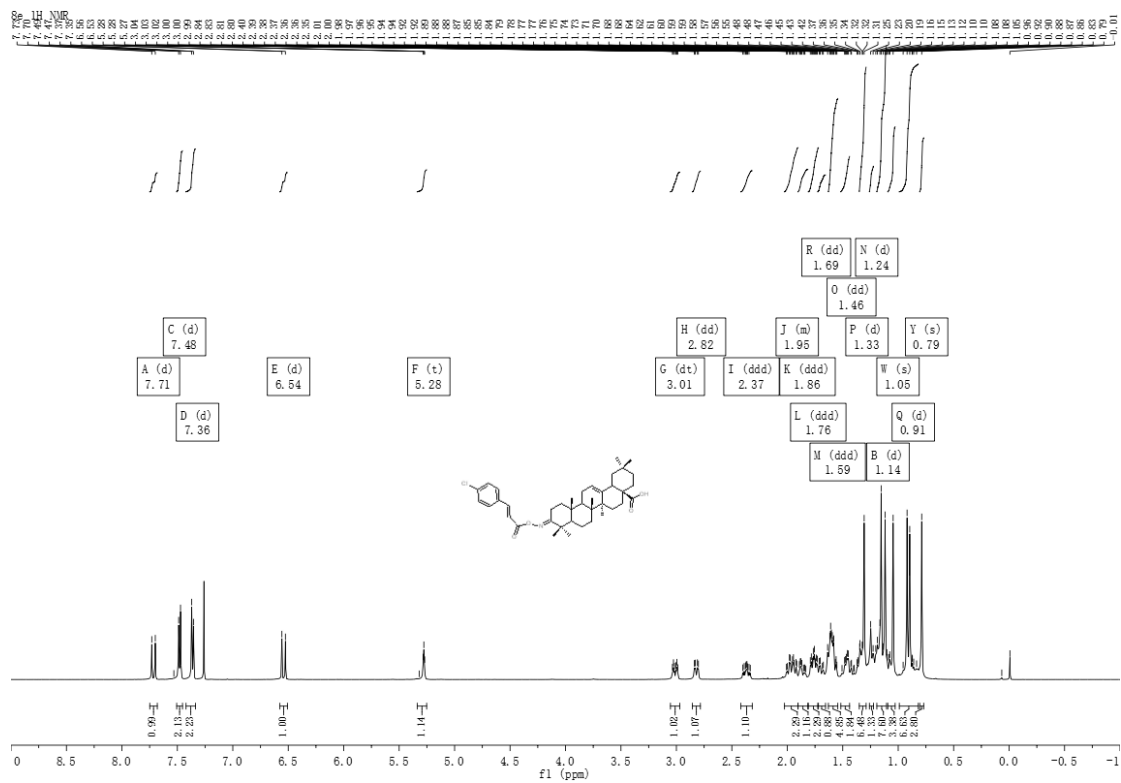


Fig.9 3e ( $^1\text{H}$  NMR)

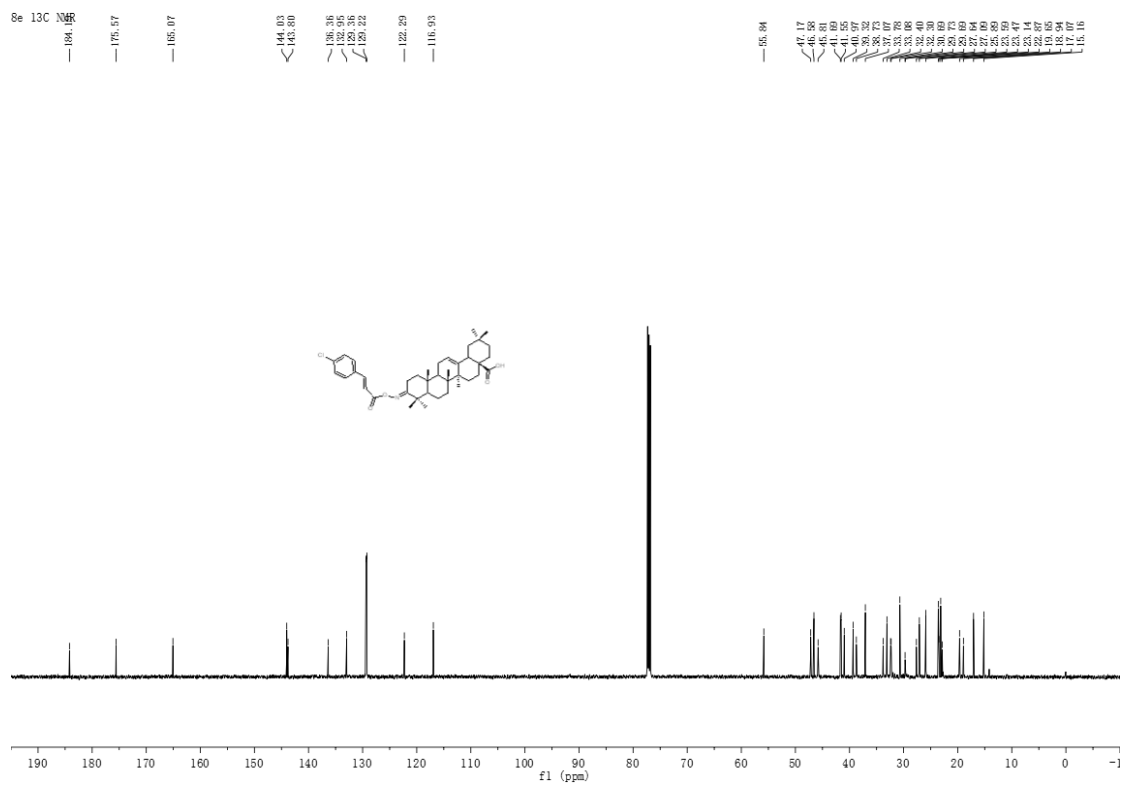


Fig.10 3e ( $^{13}\text{C}$  NMR)

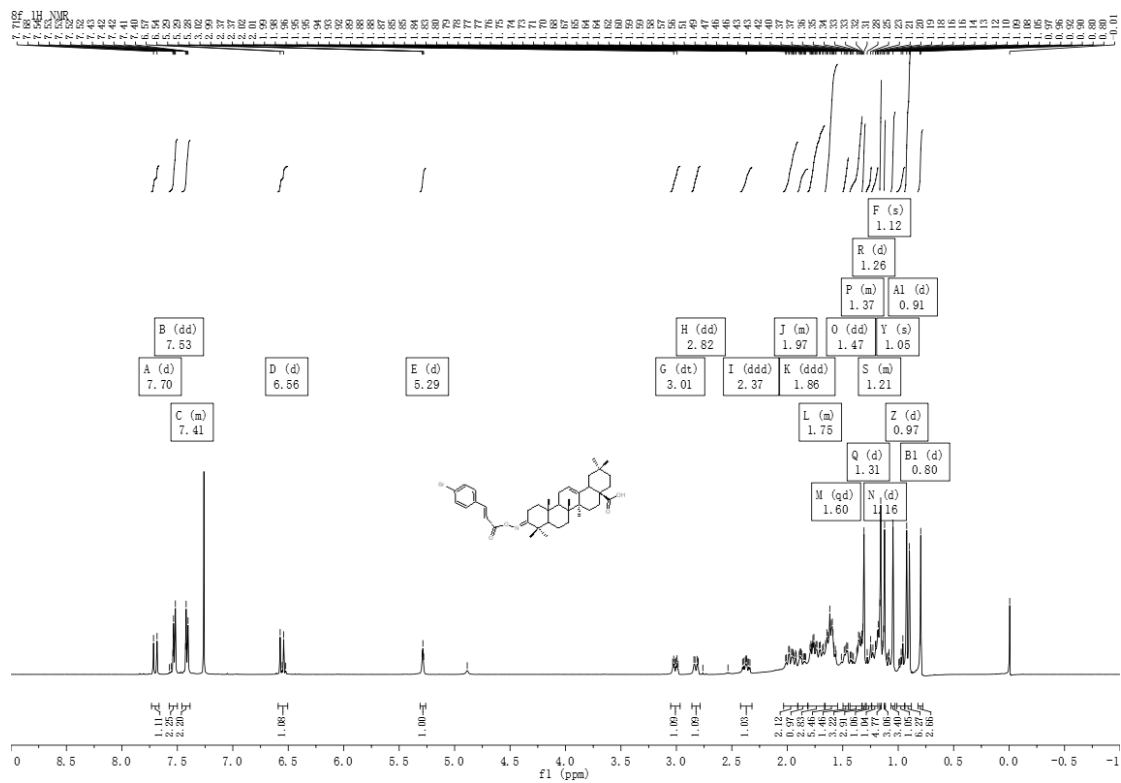


Fig.11 3f (<sup>1</sup>H NMR)

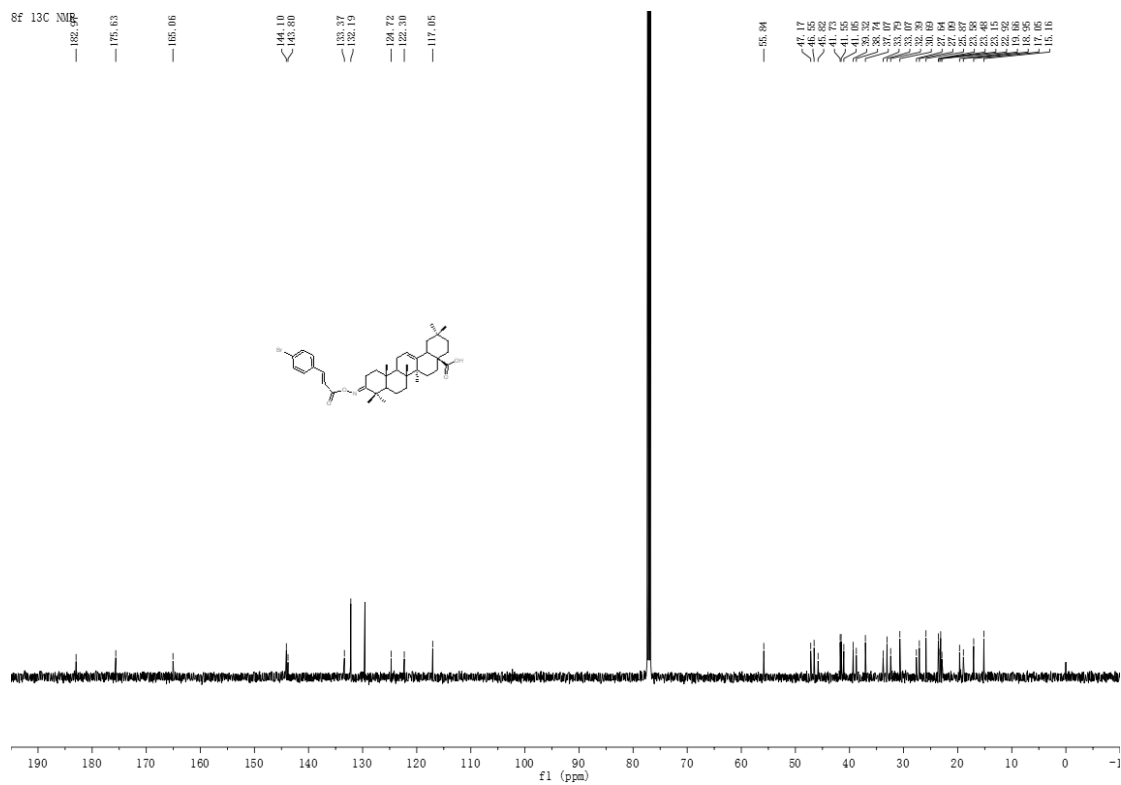


Fig.12 3f (<sup>13</sup>C NMR)











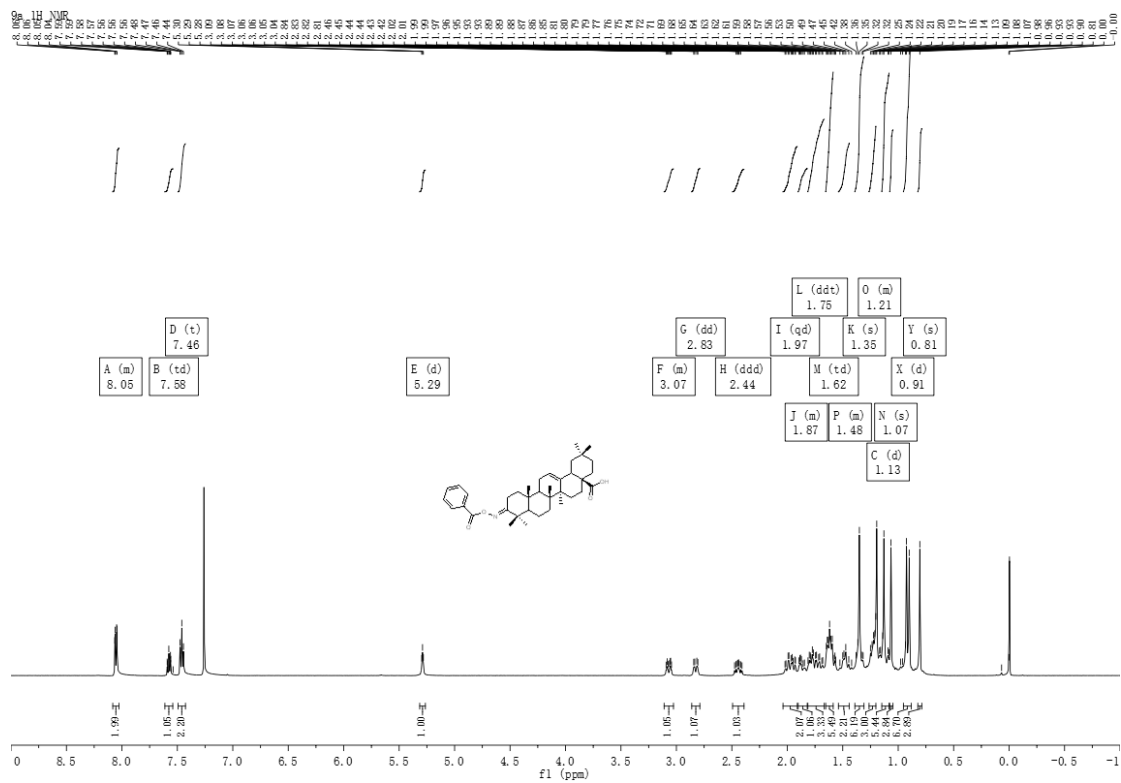


Fig.21 3k ( $^1\text{H}$  NMR)

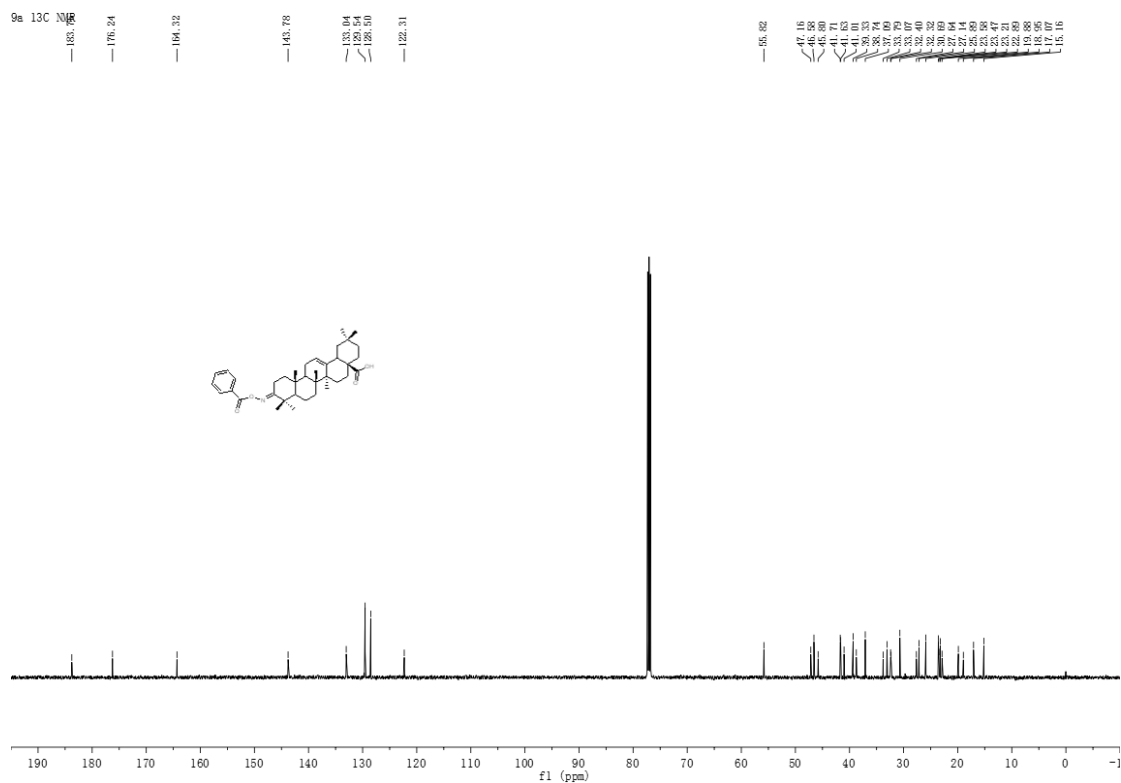


Fig.22 3k ( $^{13}\text{C}$  NMR)

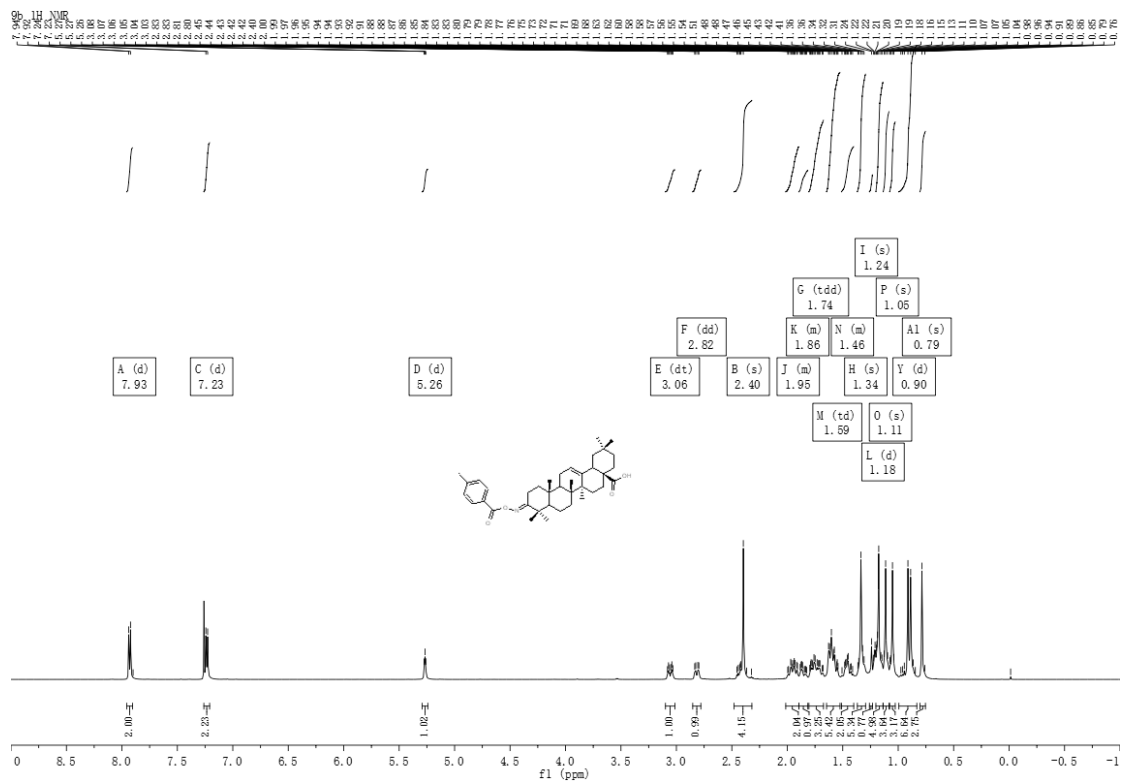


Fig.23 31 (<sup>1</sup>H NMR)

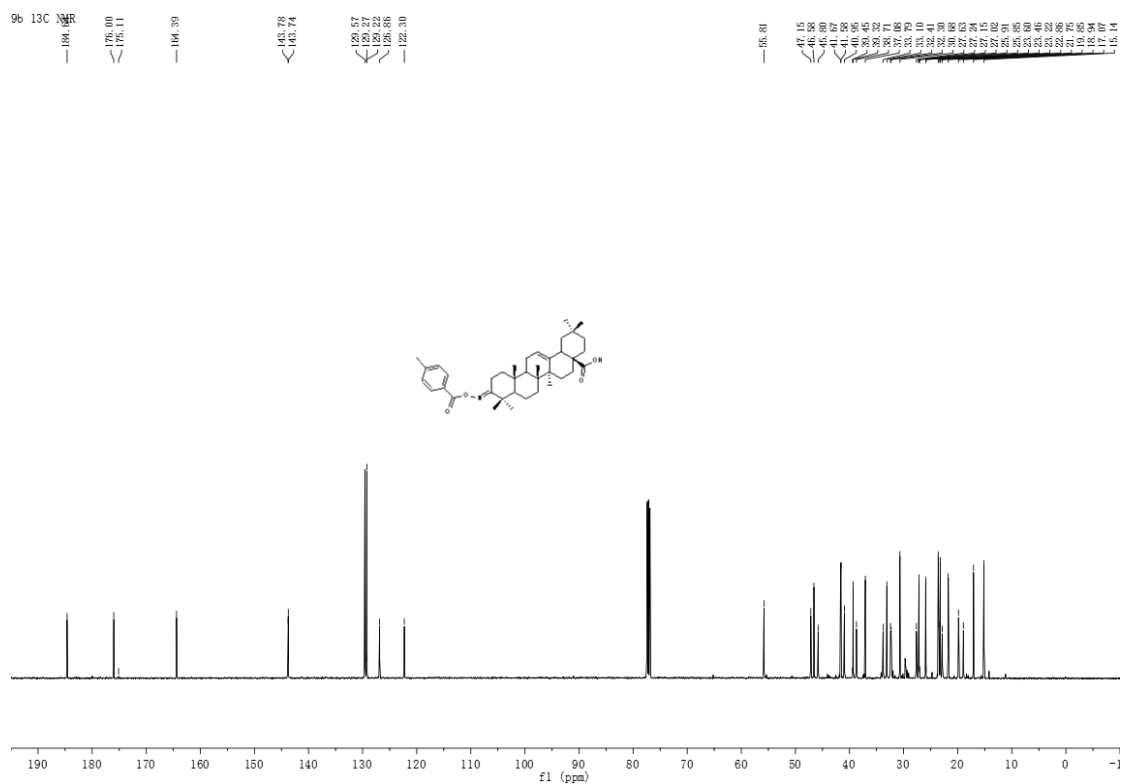


Fig.24 31 (<sup>13</sup>C NMR)

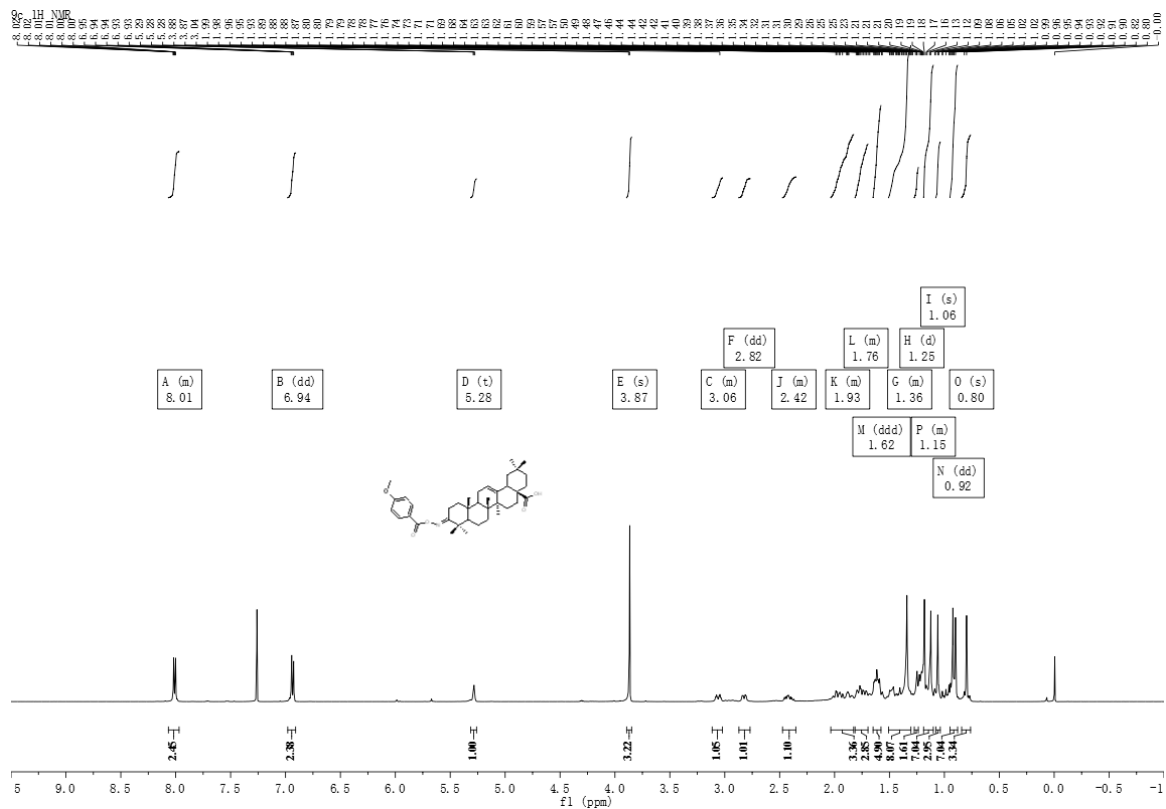


Fig.25 3m ( $^1\text{H}$  NMR)

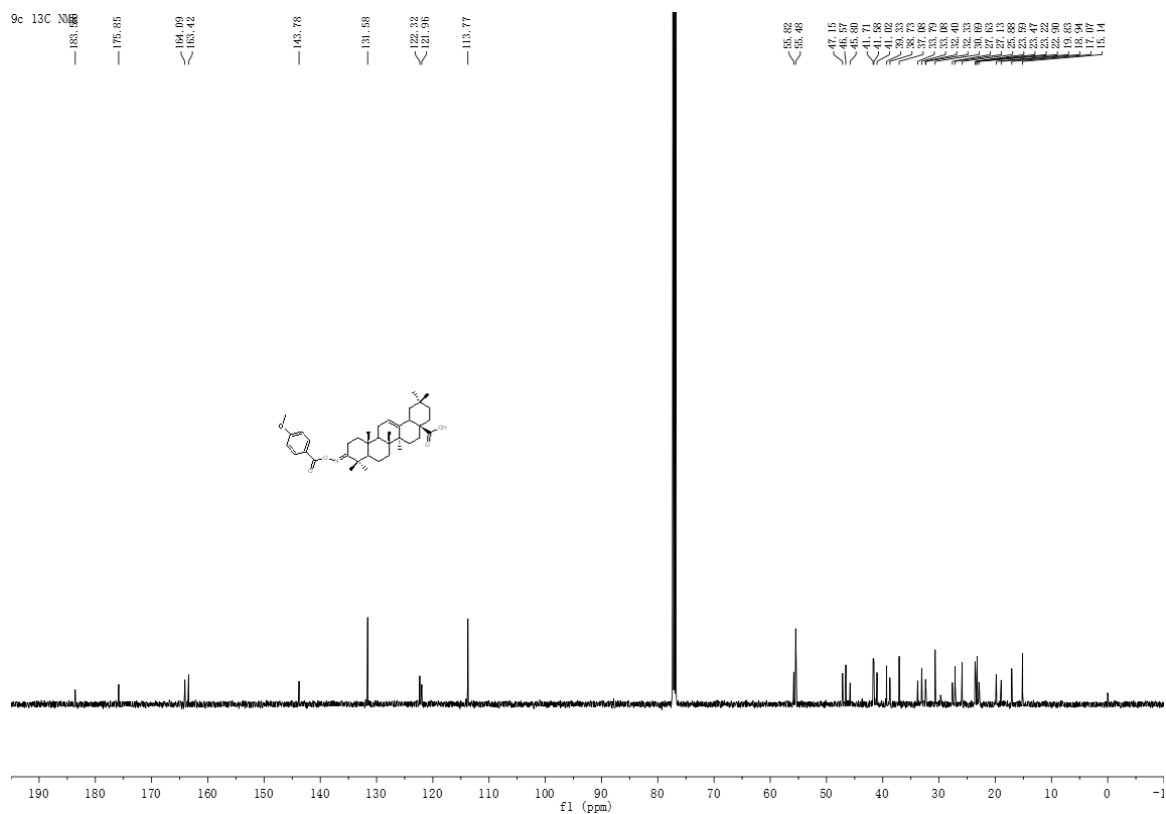


Fig.26 3m ( $^{13}\text{C}$  NMR)

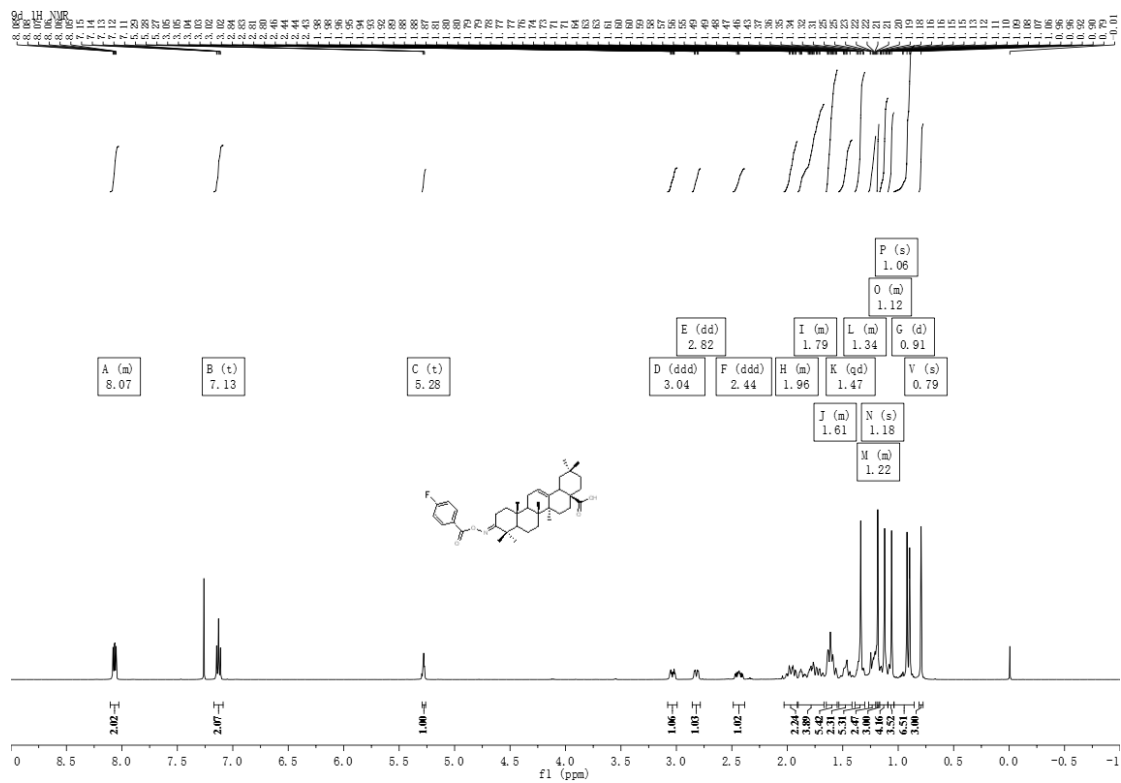


Fig.27 **3n** ( $^1\text{H}$  NMR)

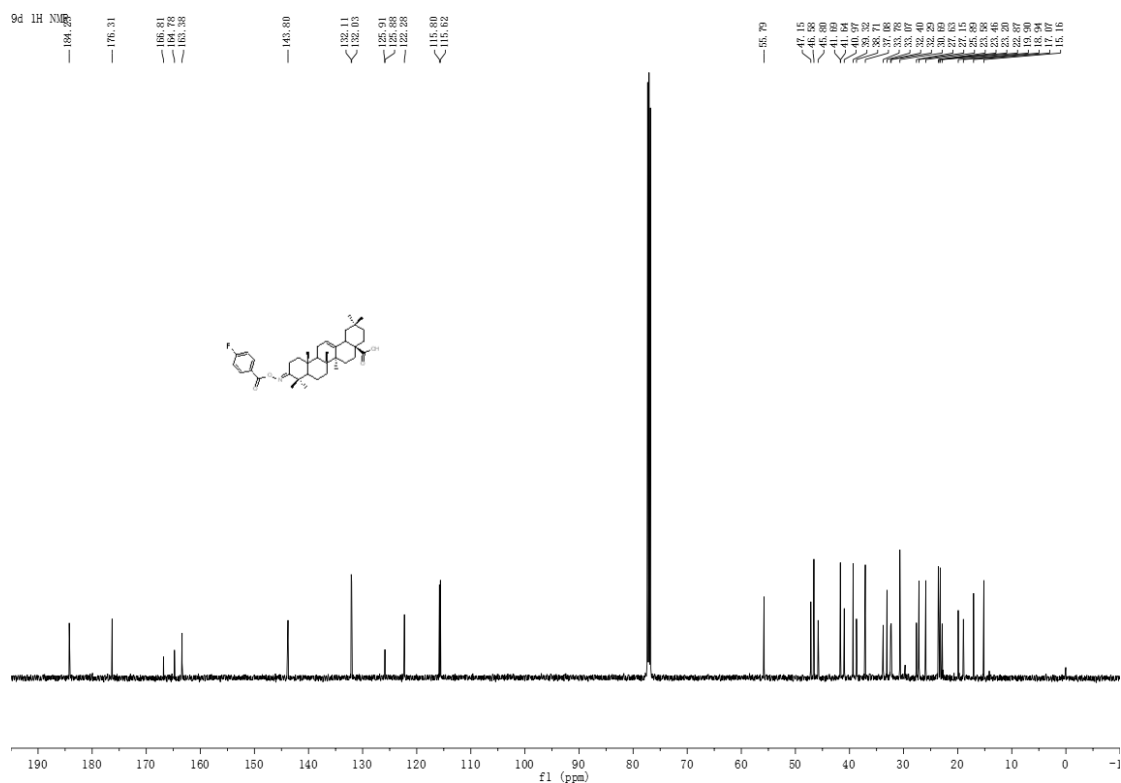


Fig.28 **3n** ( $^{13}\text{C}$  NMR)





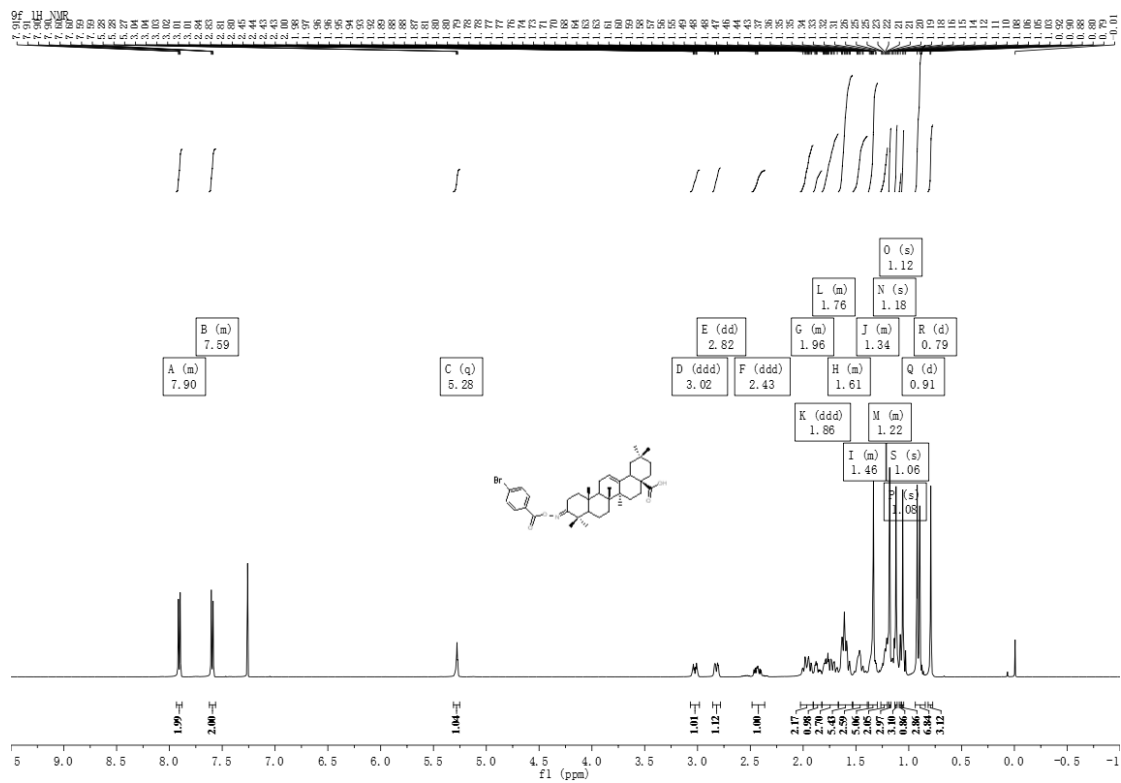


Fig.31 3p (<sup>1</sup>H NMR)

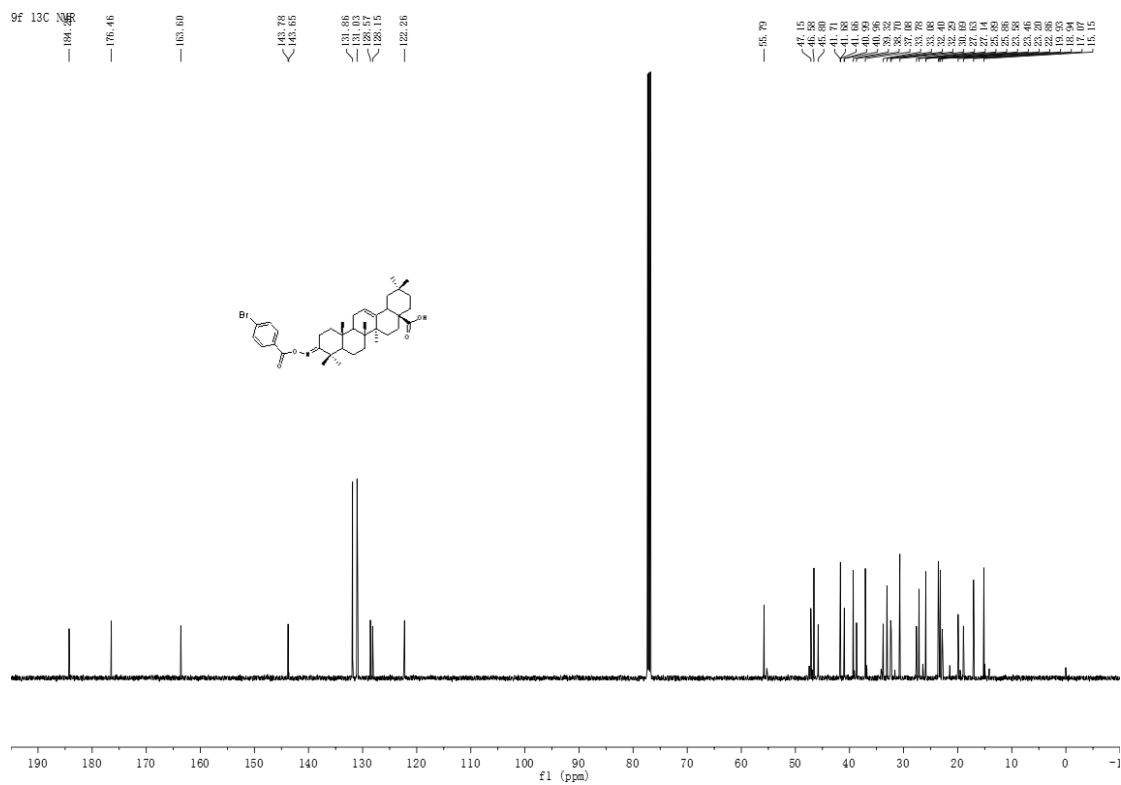


Fig.32 3p (<sup>13</sup>C NMR)



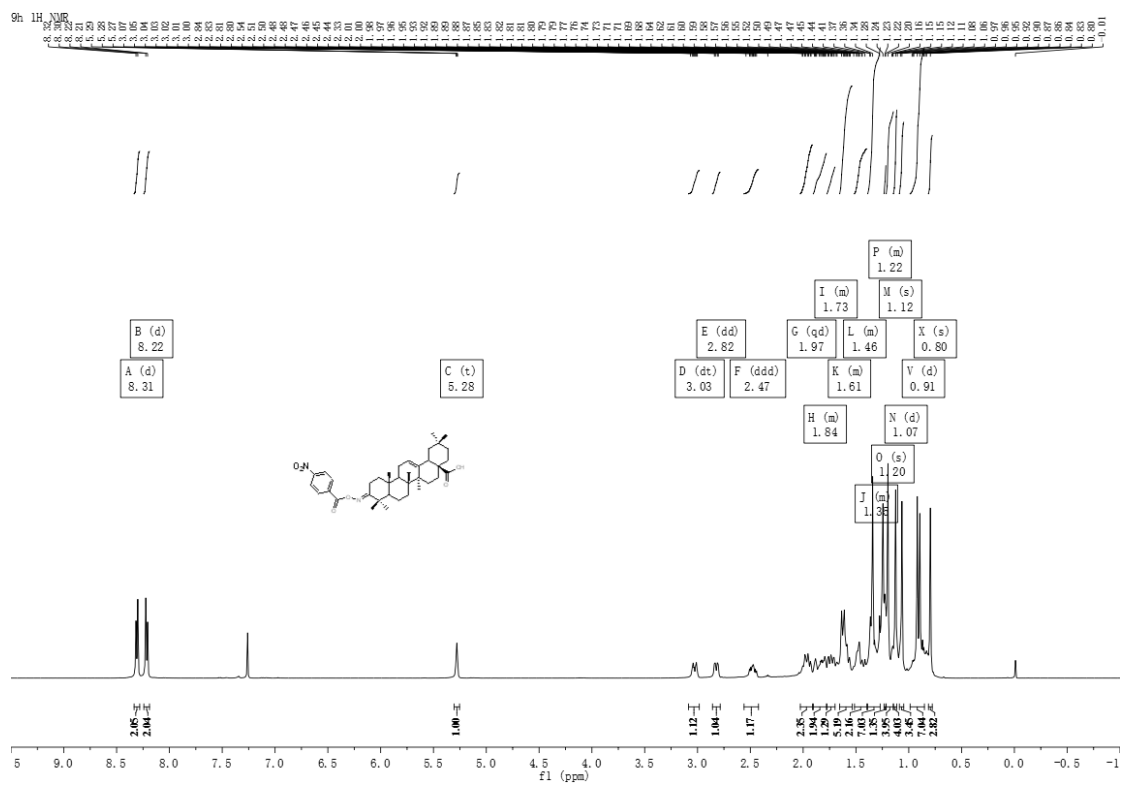


Fig.35 **3r** (<sup>1</sup>H NMR)

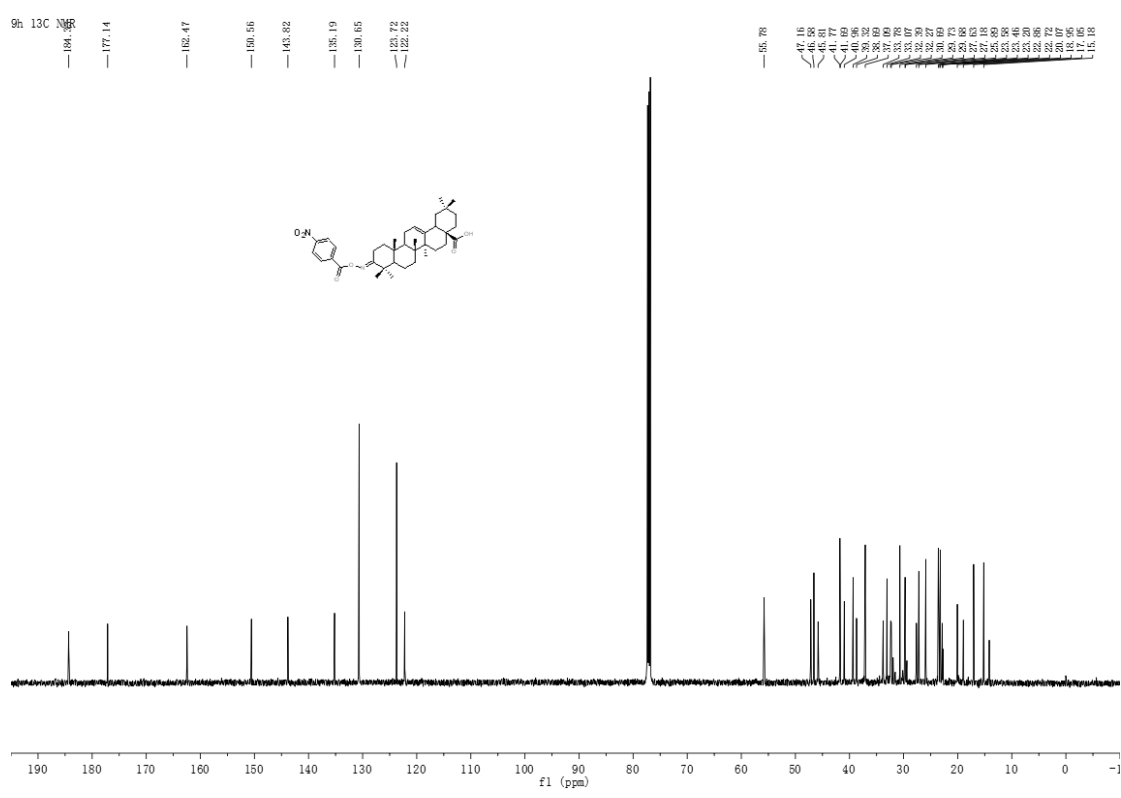


Fig.36 **3r** (<sup>13</sup>C NMR)

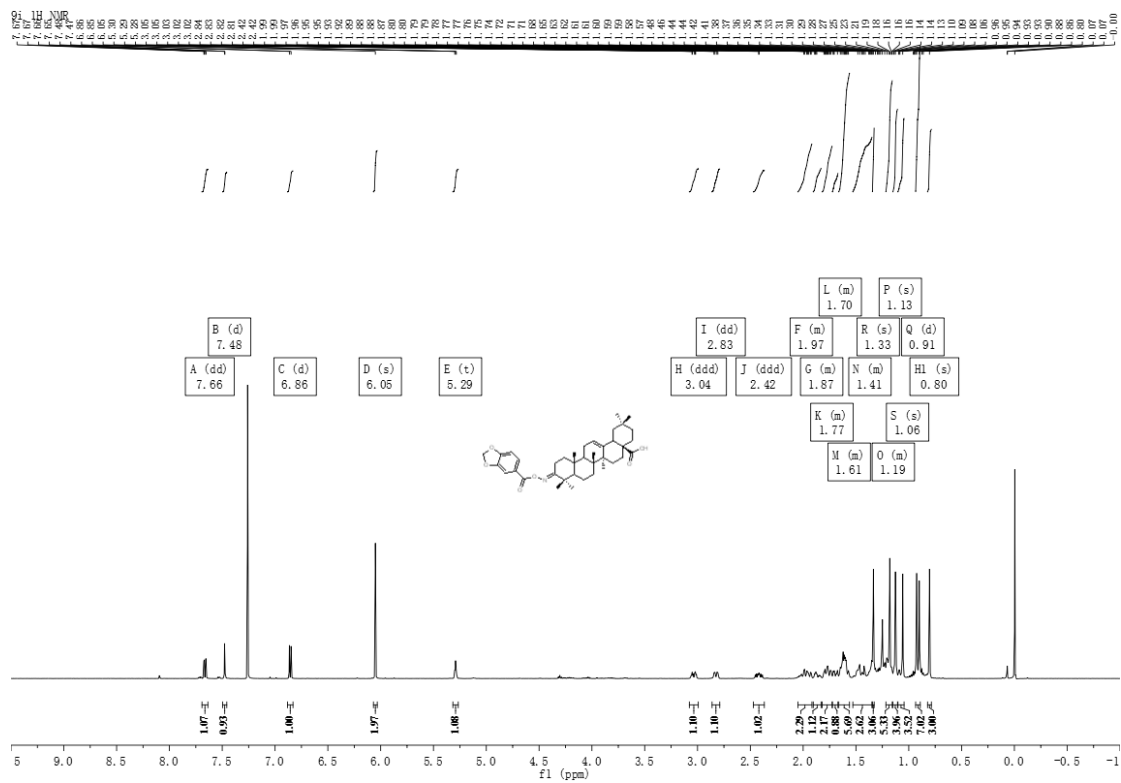


Fig.37 3s ( $^1\text{H}$  NMR)

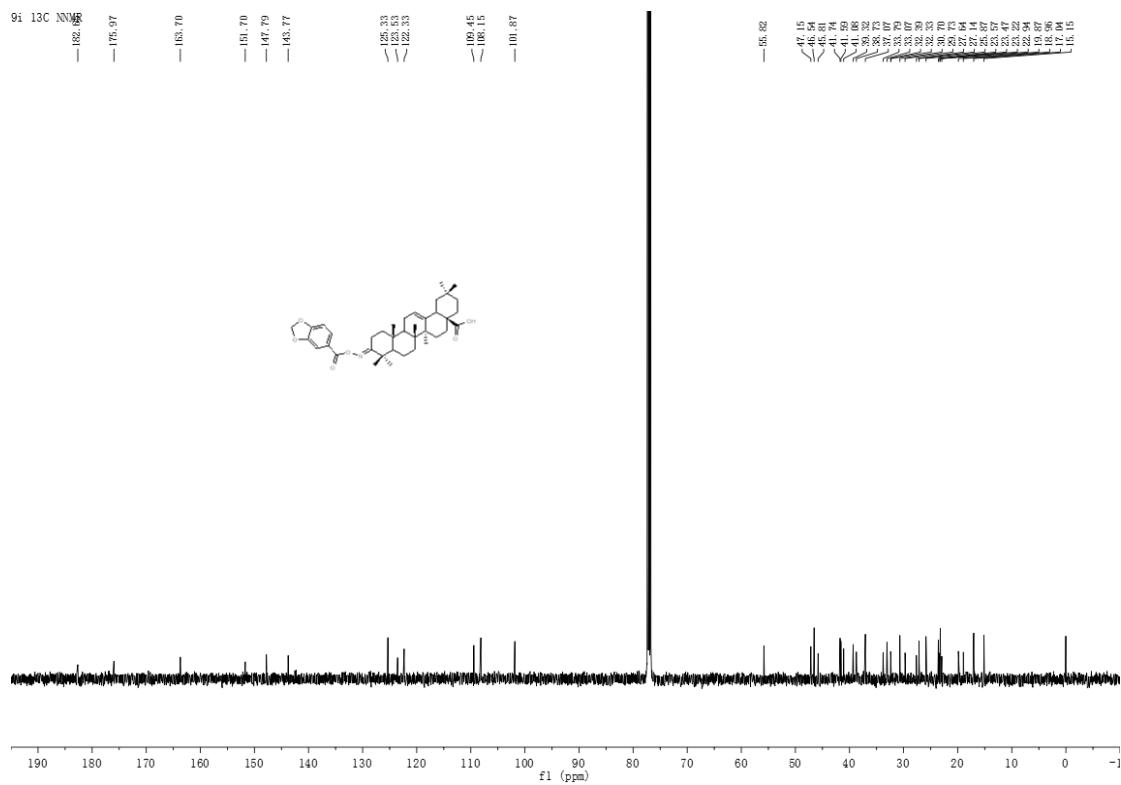


Fig.38 3s ( $^{13}\text{C}$  NMR)

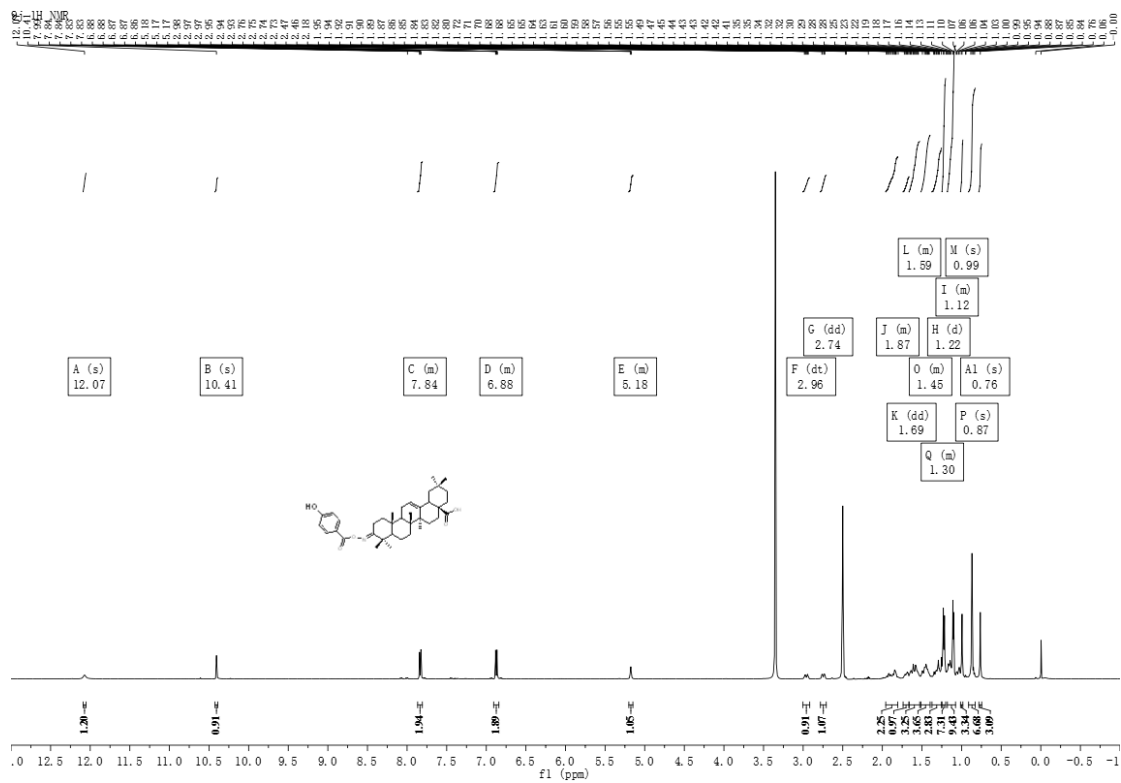


Fig.39 3t ( $^1\text{H}$  NMR)

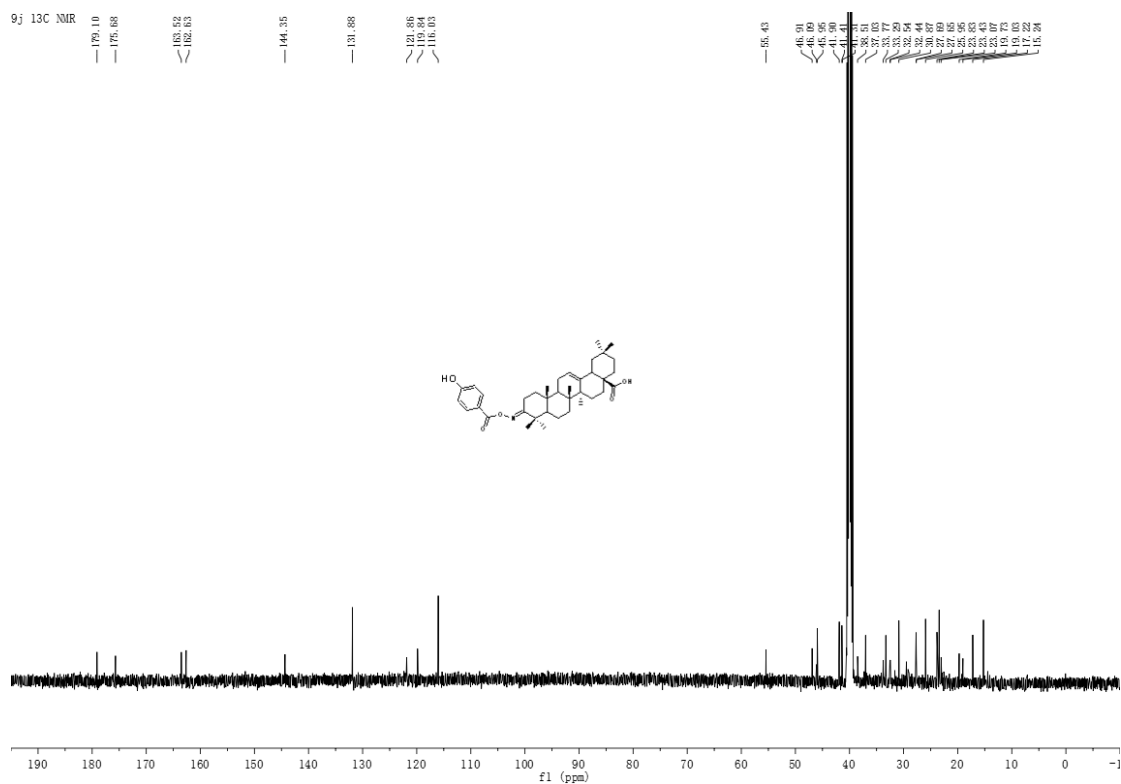


Fig.40 3t ( $^{13}\text{C}$  NMR)

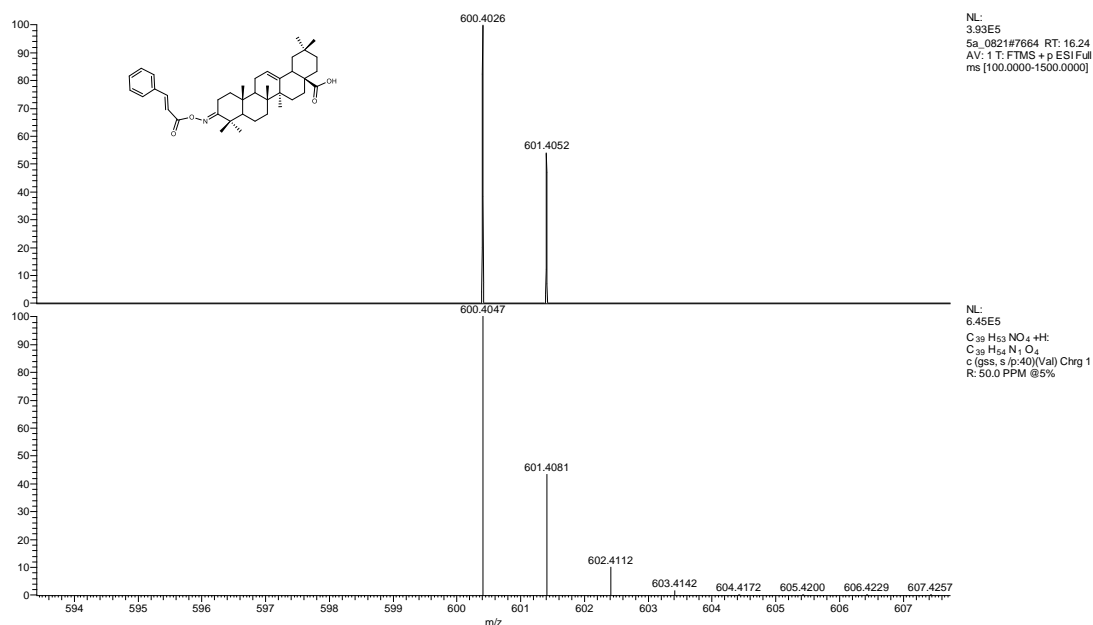


Fig.41 **3a** (HRMS)

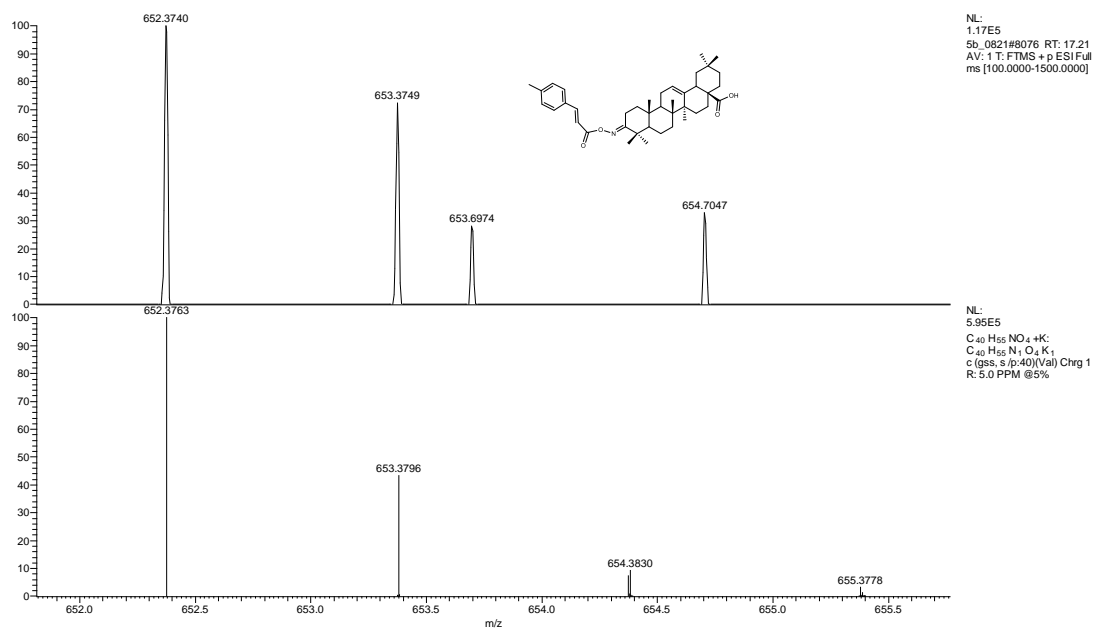


Fig.42 **3b** (HRMS)

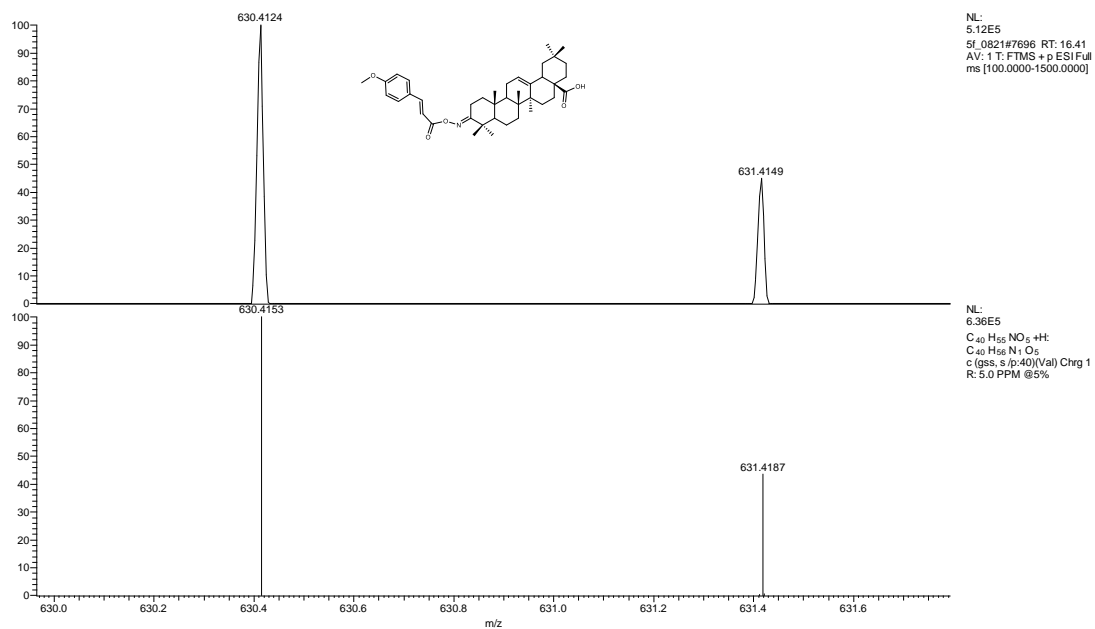


Fig.43 3c (HRMS)

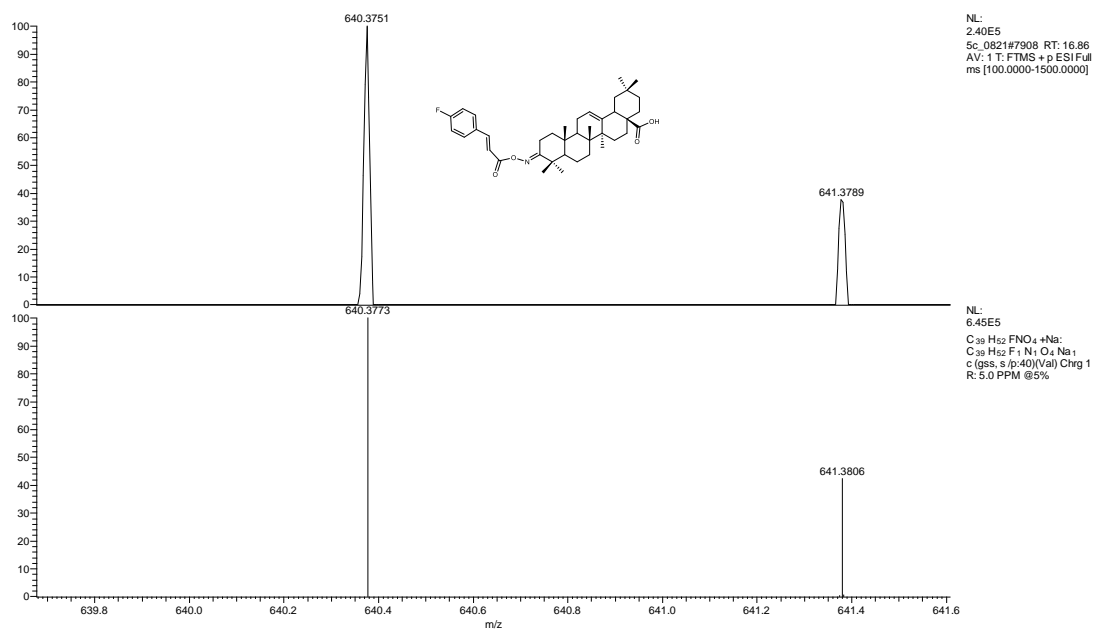


Fig.44 3d (HRMS)

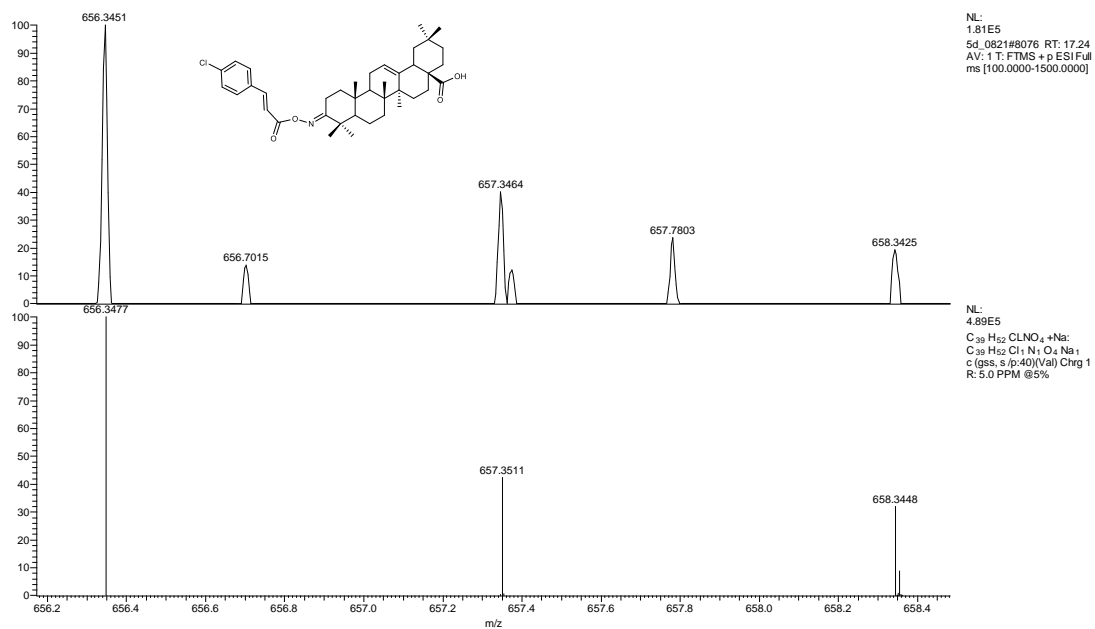


Fig.45 **3e** (HRMS)

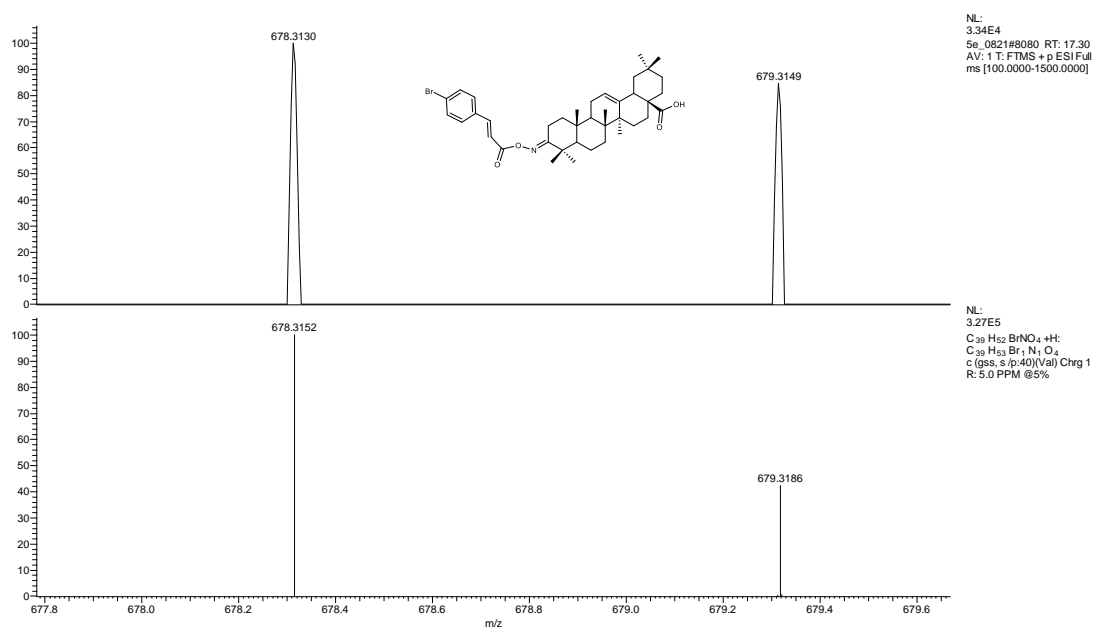


Fig.46 **3f** (HRMS)



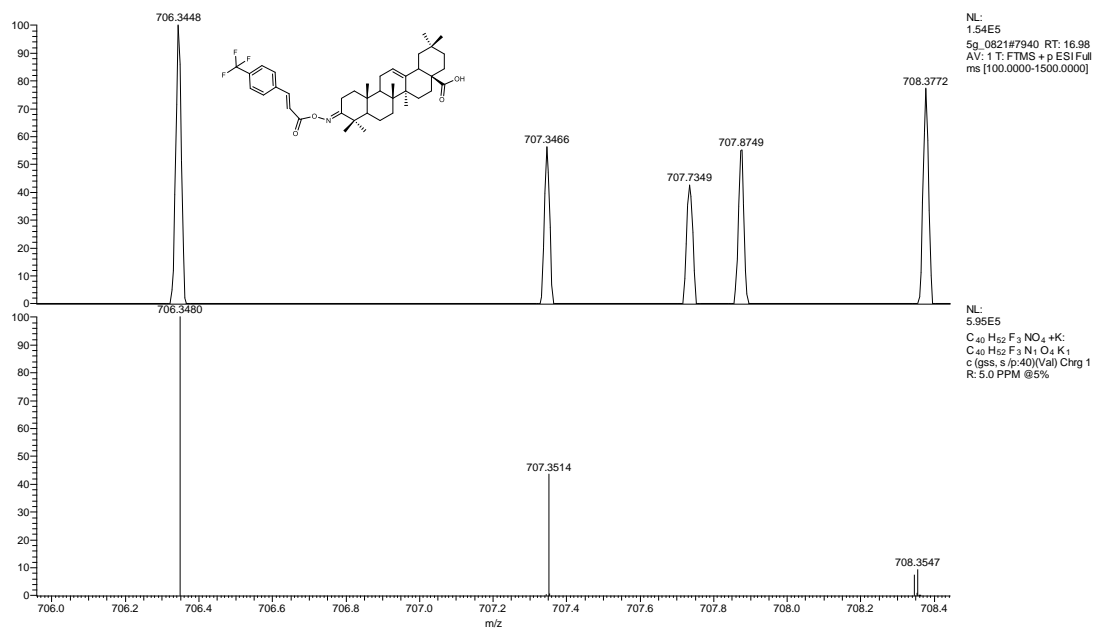


Fig.47 **3g** (HRMS)

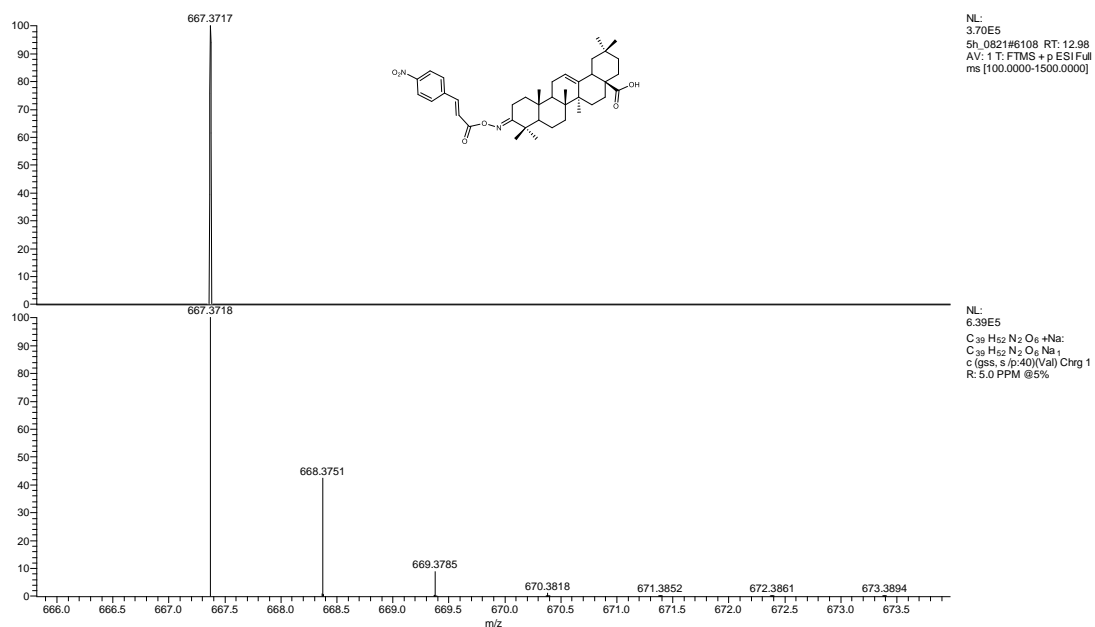


Fig.48 **3h** (HRMS)

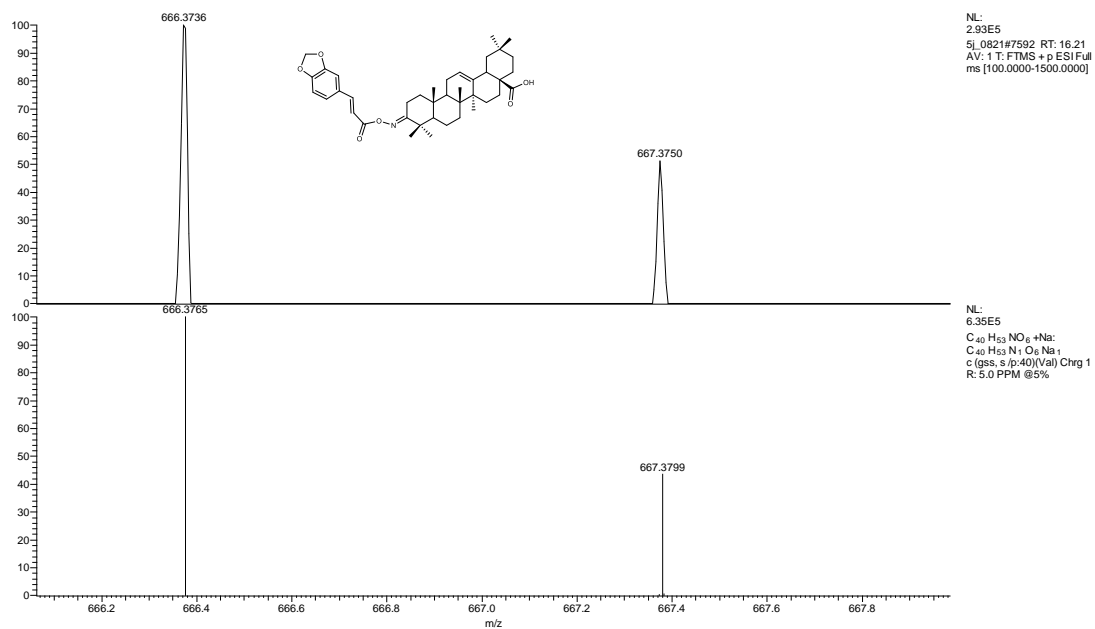


Fig.49 **3i** (HRMS)

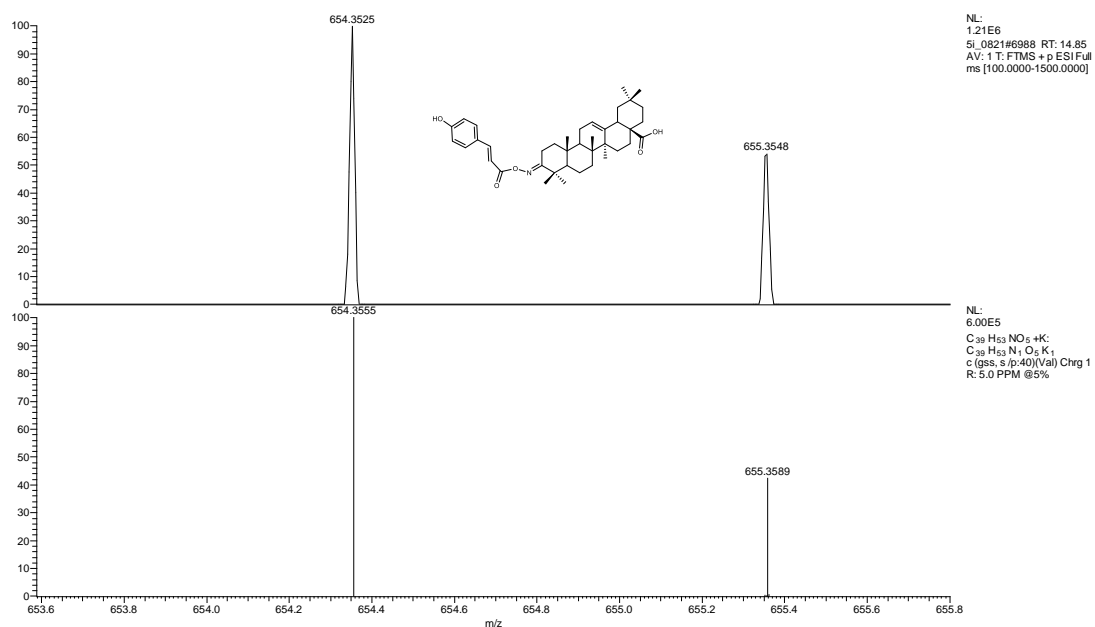


Fig.50 **3j** (HRMS)

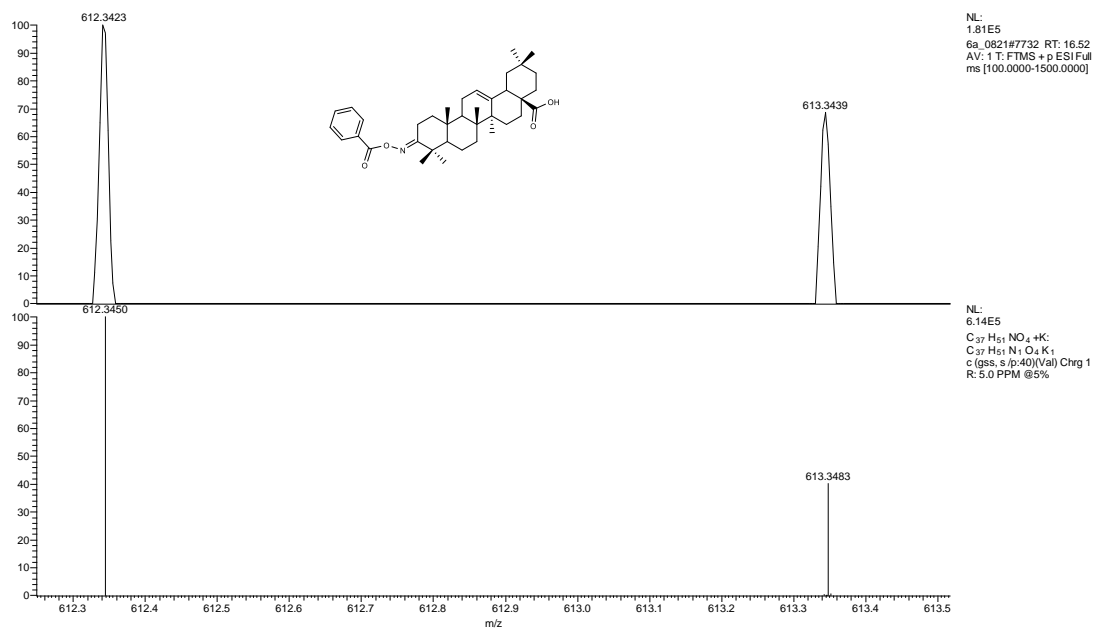


Fig.51 3k (HRMS)

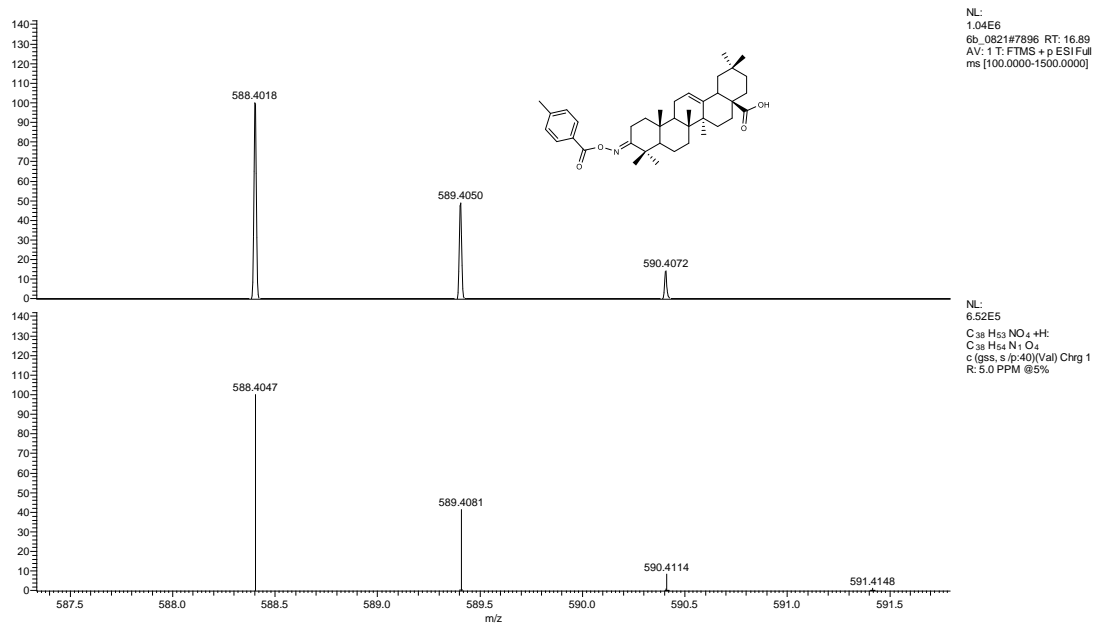


Fig.52 3l (HRMS)

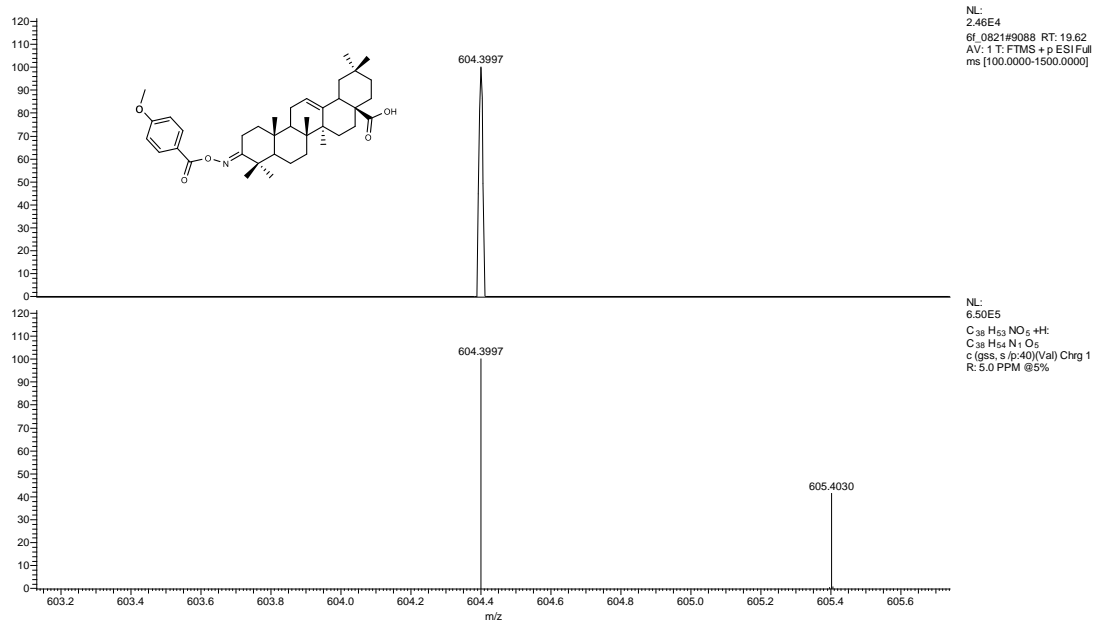


Fig.53 **3m** (HRMS)

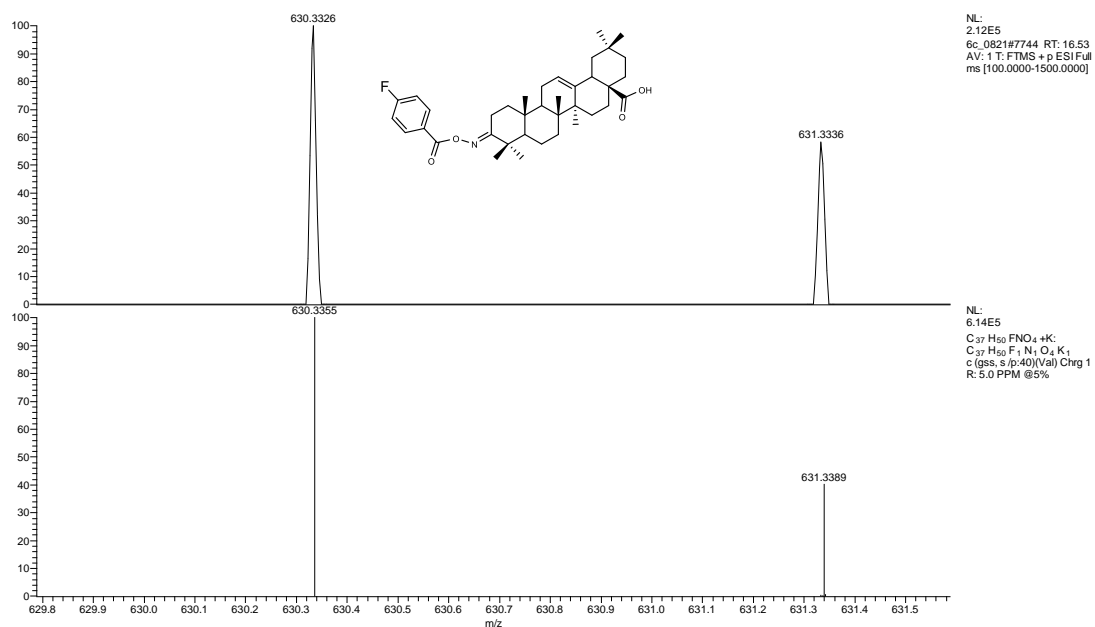


Fig.54 **3n** (HRMS)

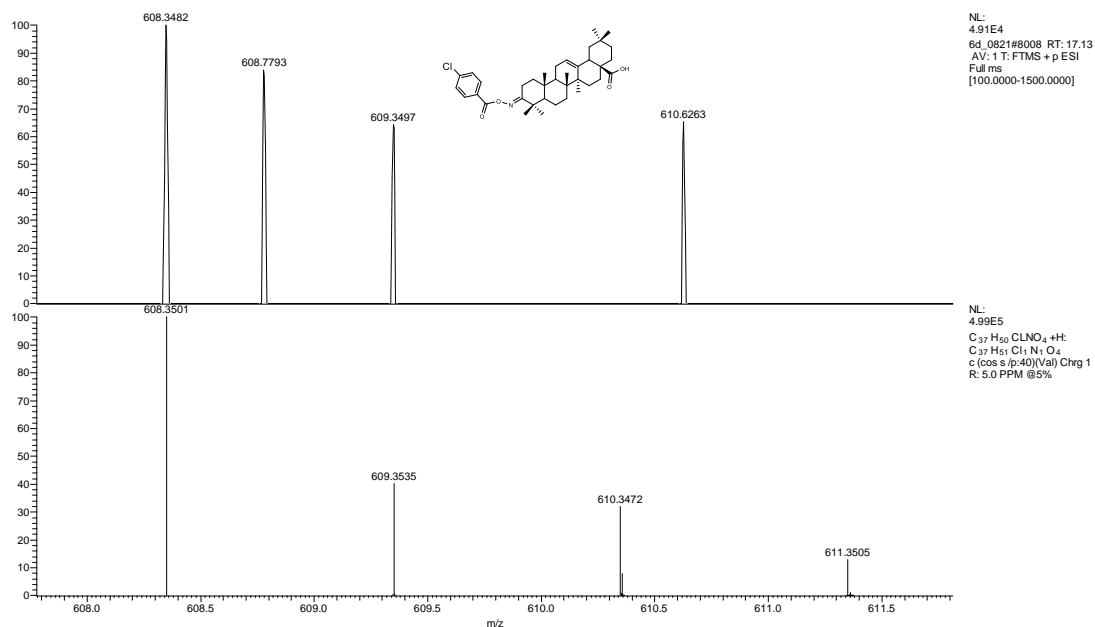


Fig.55 **3o** (HRMS)

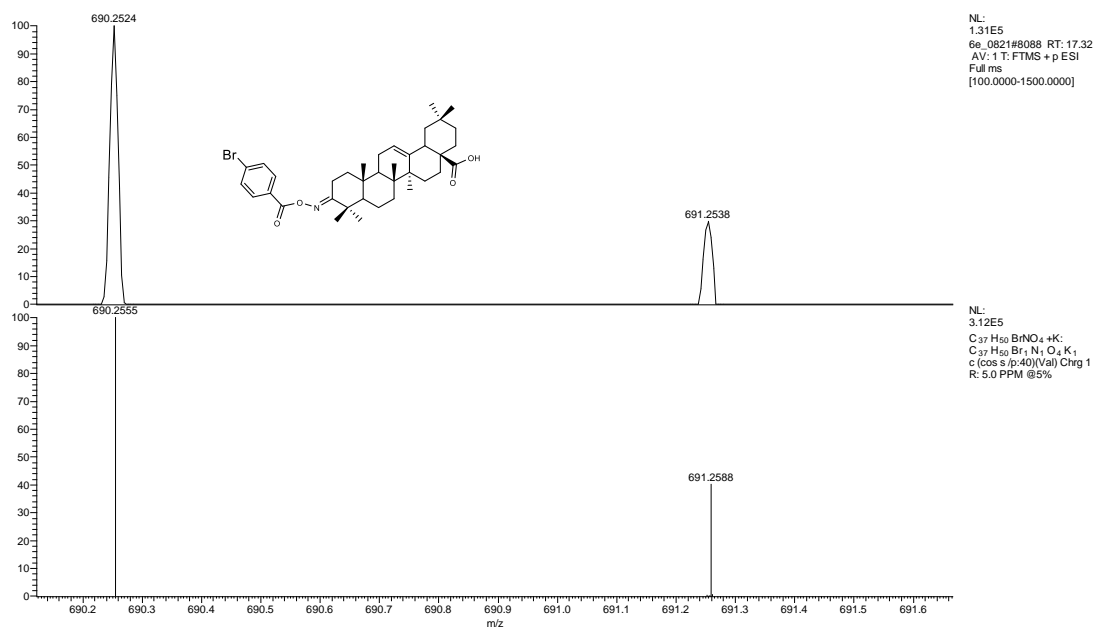


Fig.56 **3p** (HRMS)

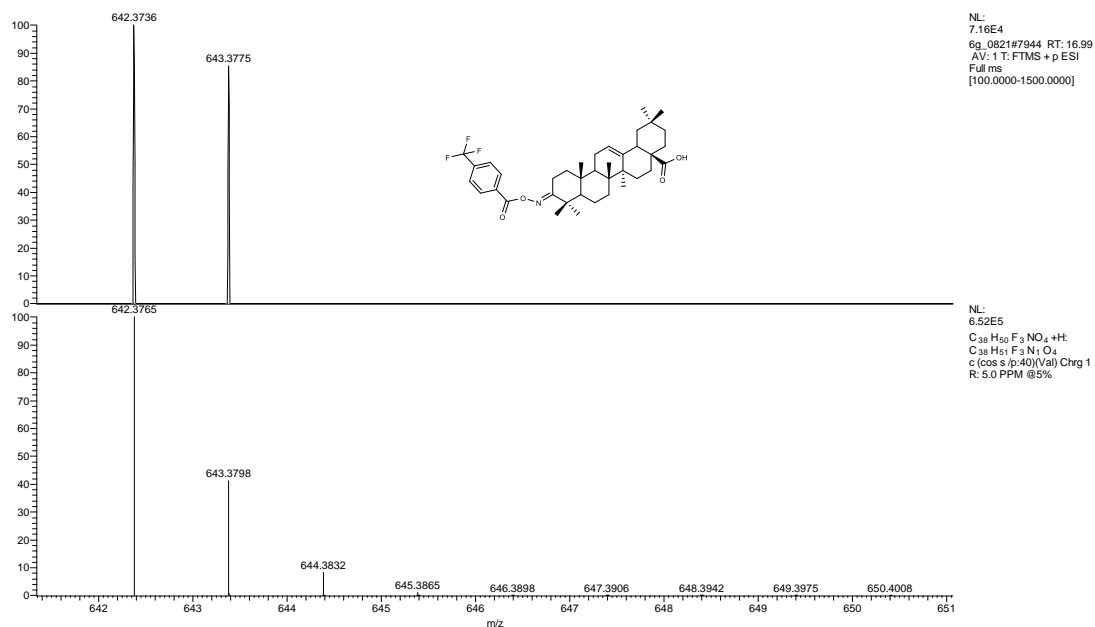


Fig.57 **3q** (HRMS)

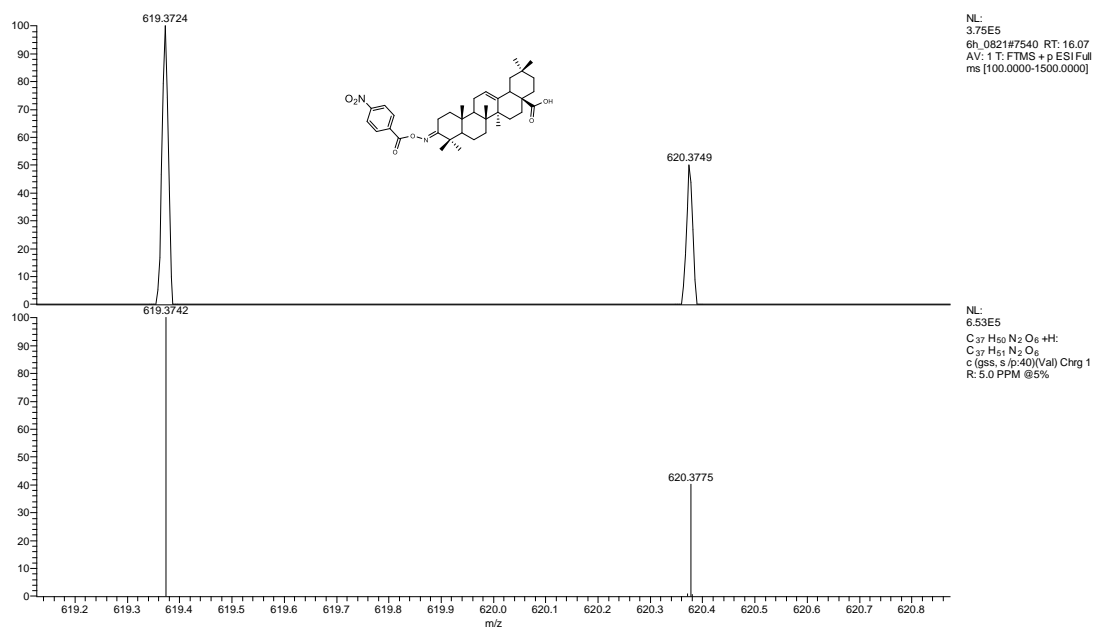


Fig.58 **3r** (HRMS)

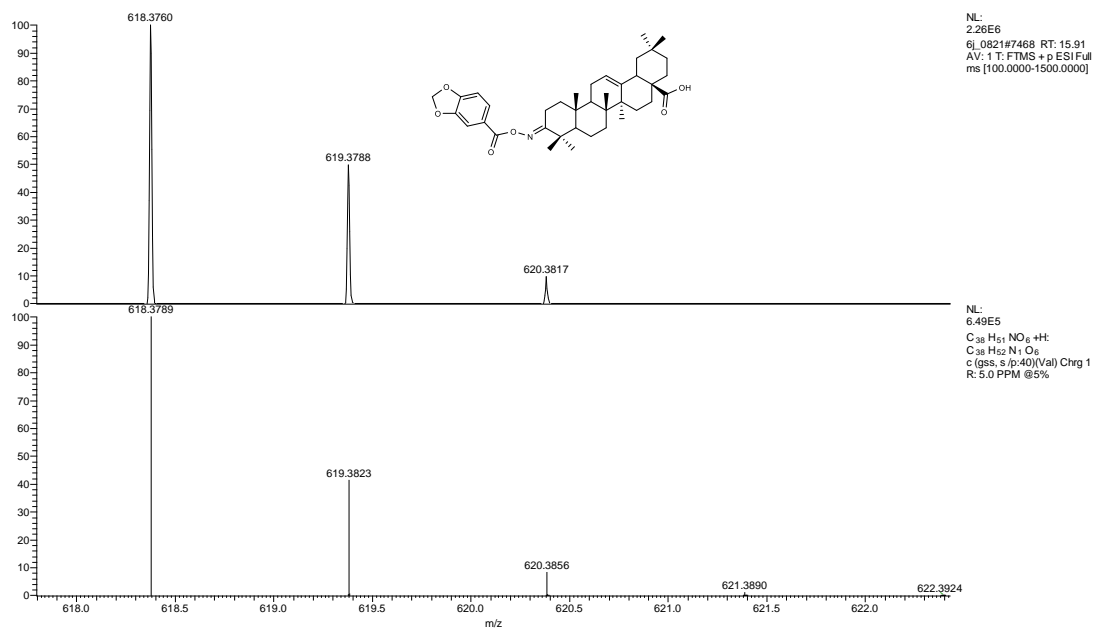


Fig.59 **3s** (HRMS)

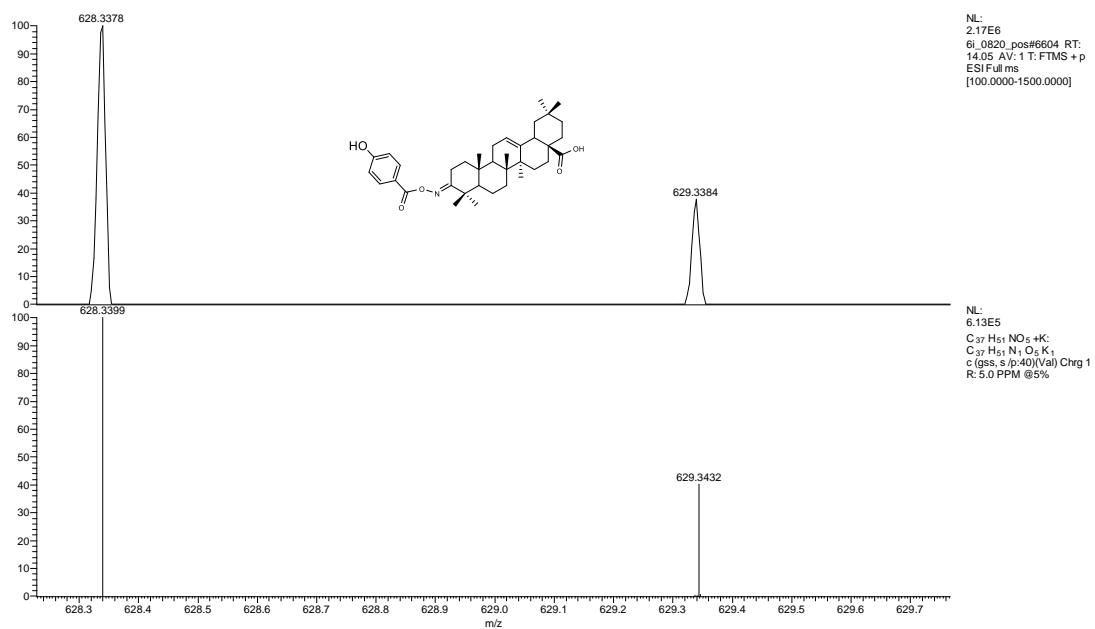


Fig.60 **3t** (HRMS)