

Design and synthesis of novel dehydroepiandrosterone analogues as potent anticancer agents

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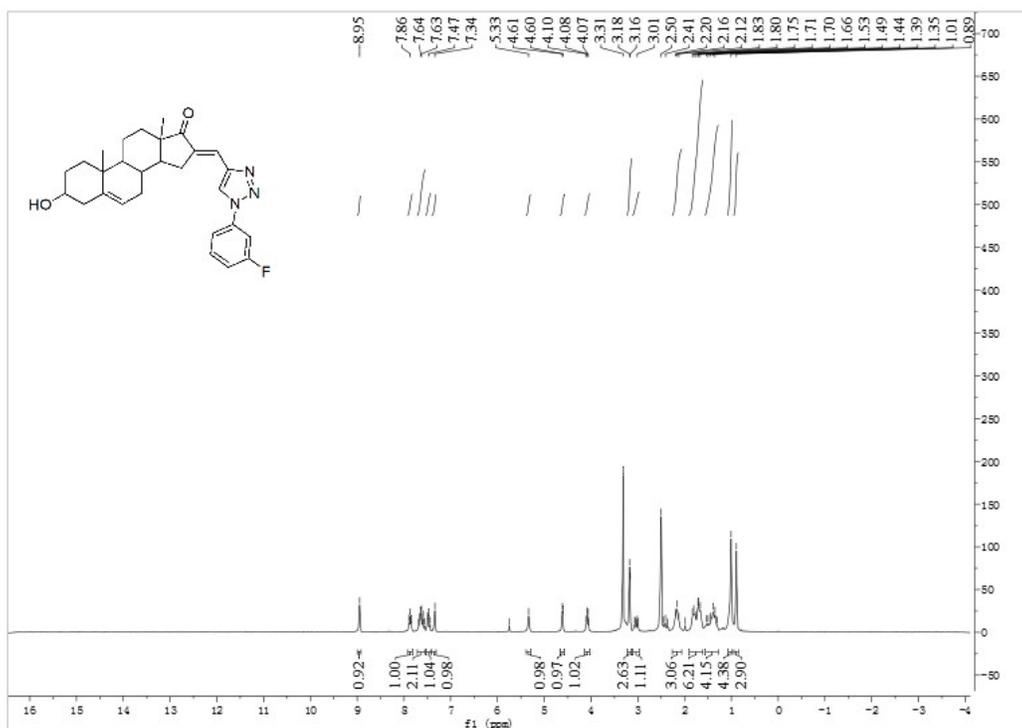
Key Laboratory of Natural Resources and Functional Molecules of the Changbai Mountain, Affiliated Ministry of Education, College of Pharmacy, Yanbian University, Yanji, Jilin, 133002, China.

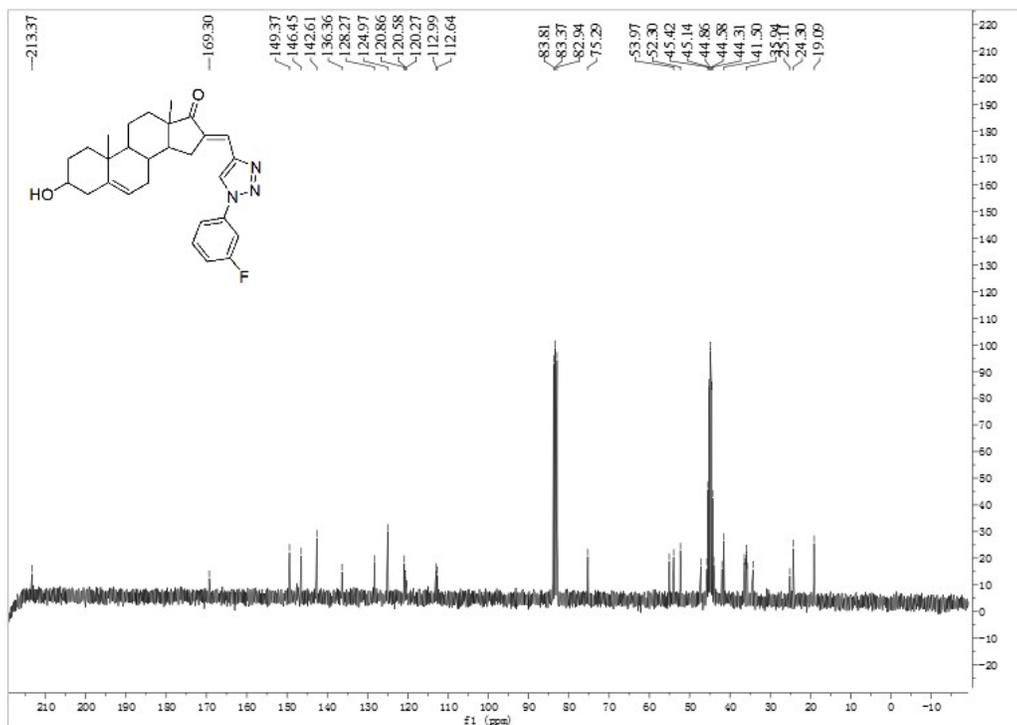
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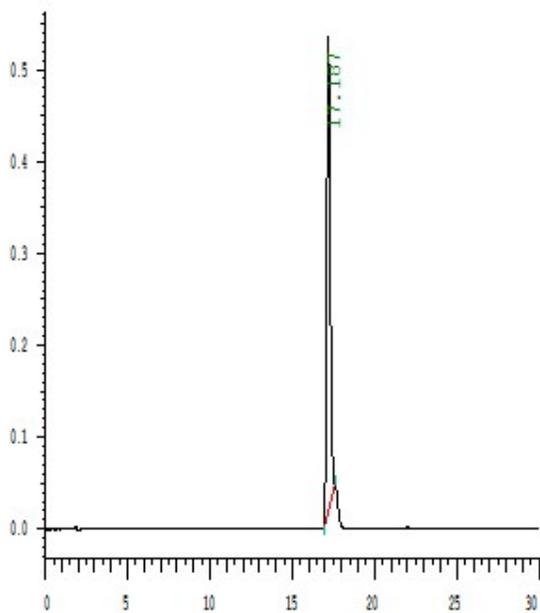
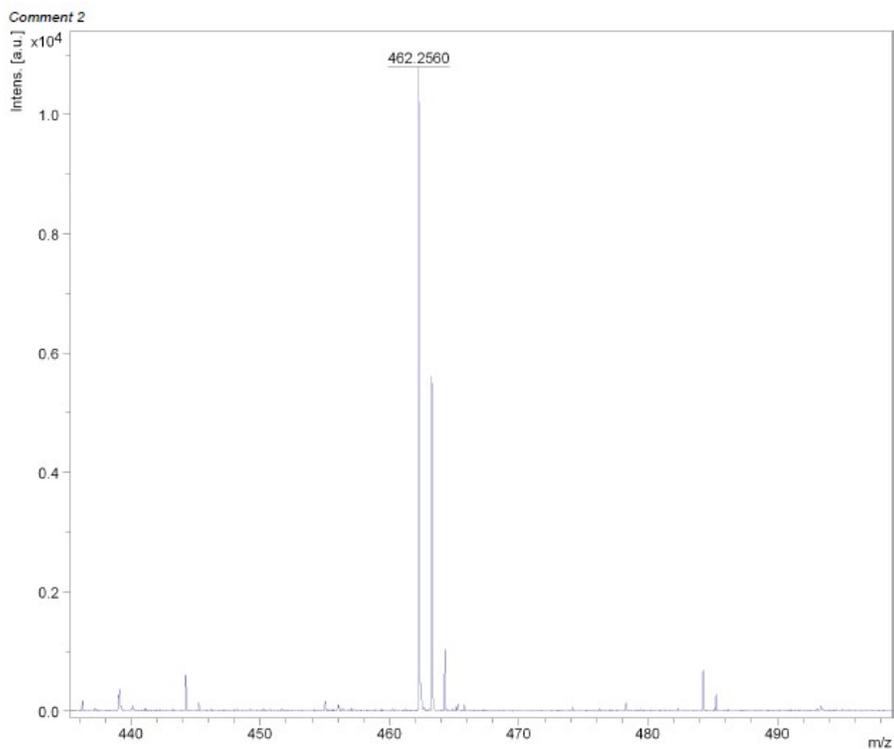
*Corresponding author: Tel: + 86 433 243-6028; Fax: + 86 433 243-5026.

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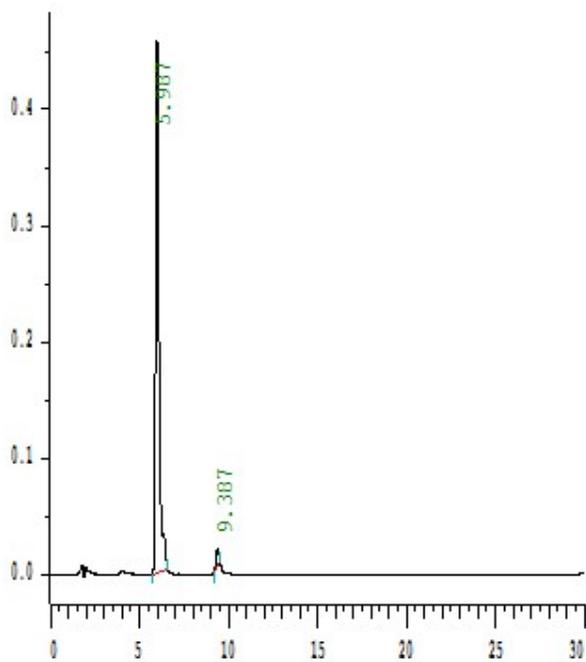
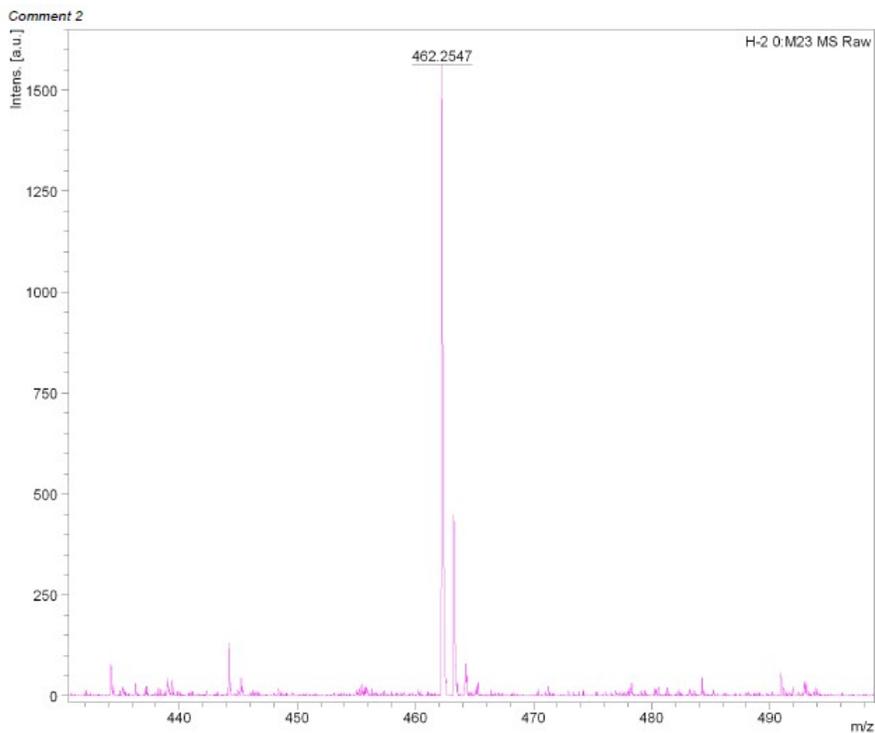




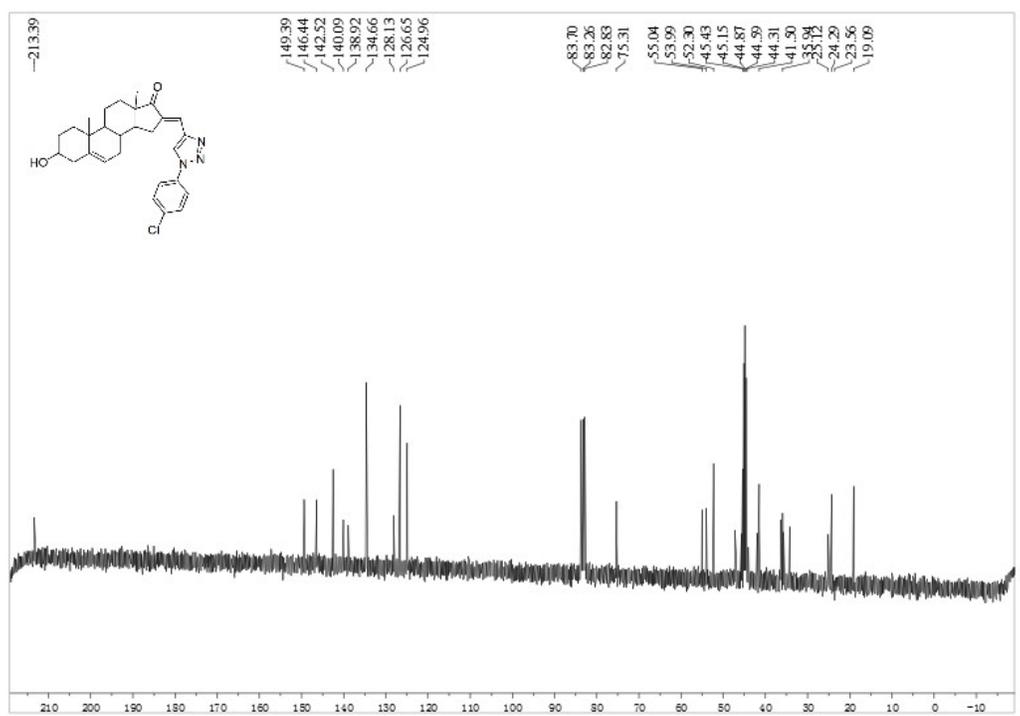
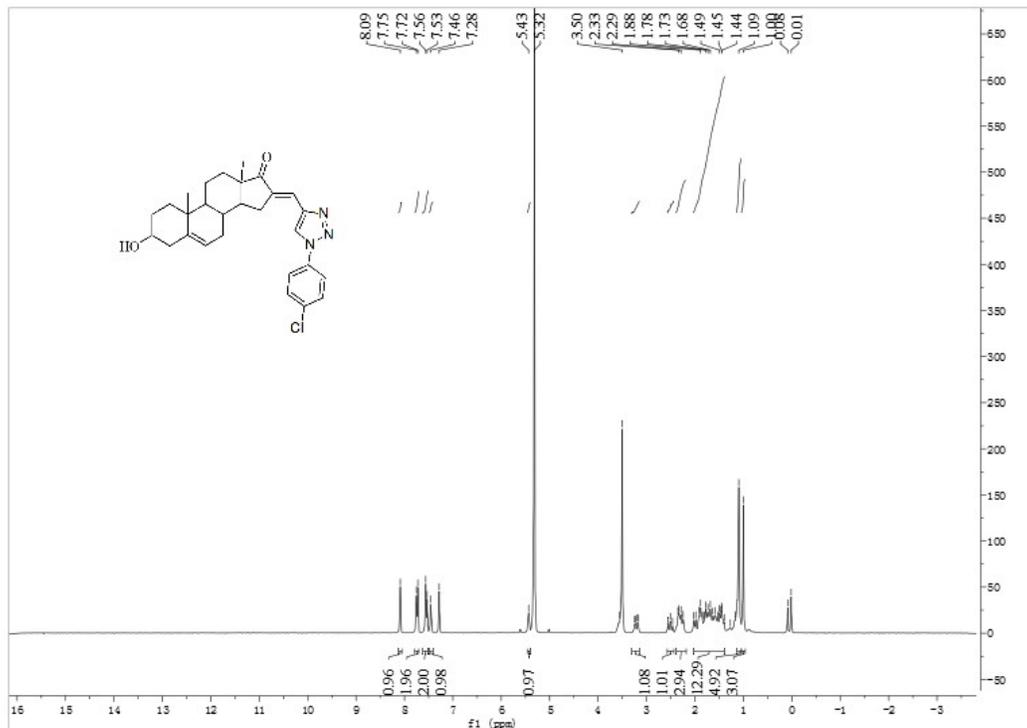
¹H-NMR, ¹³C-NMR: (E)-16-((1-(3-fluorophenyl)-1H-1,2,3-triazol-4-yl)methylene)-3-hydroxy-10,13-di-methyl-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2H-cyclopenta[a]phenanthren-17(14H)-one (2c)



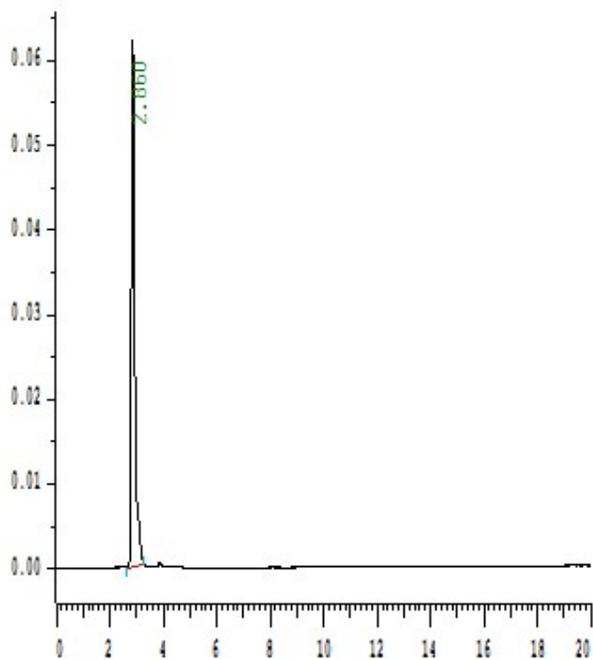
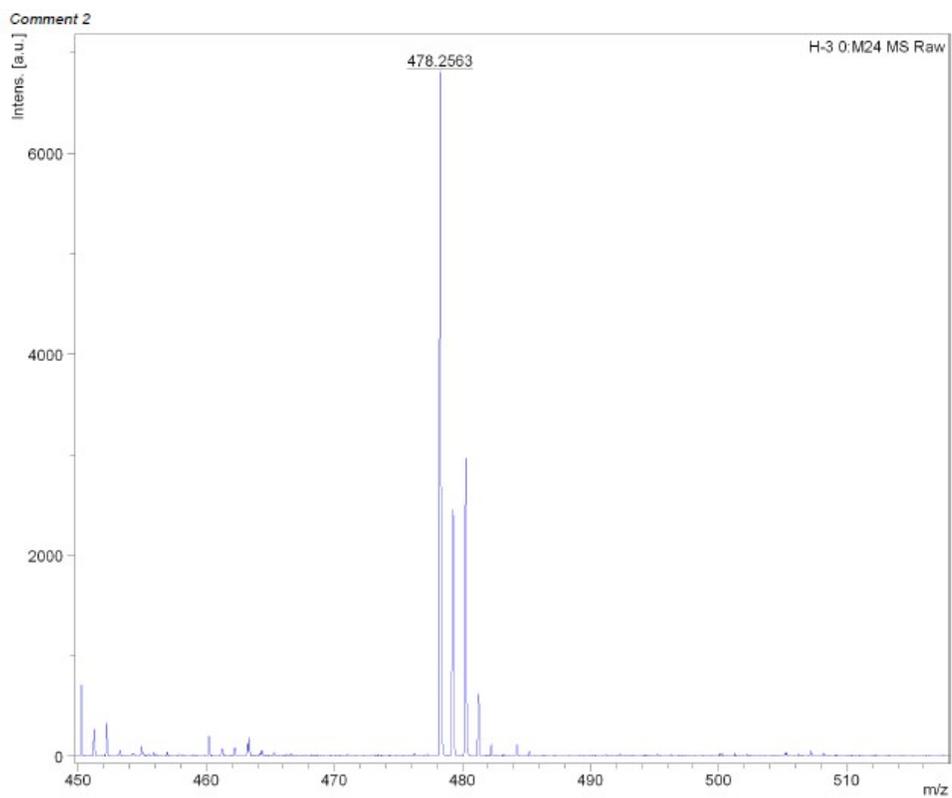
HRMS, HPLC: (*E*)-16-((1-(3-fluorophenyl)-1*H*-1,2,3-triazol-4-yl)methylene)-3-hydroxy-10,13-di-methyl-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2*H*-cyclopenta[*a*]phenanthren-17(14*H*)-one (2c)



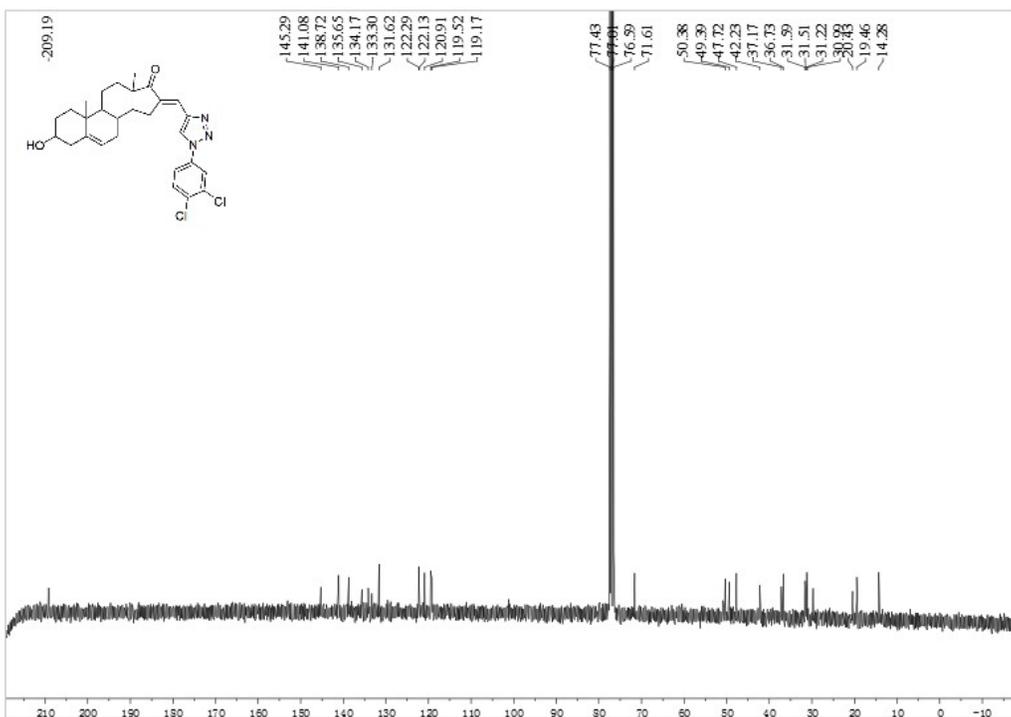
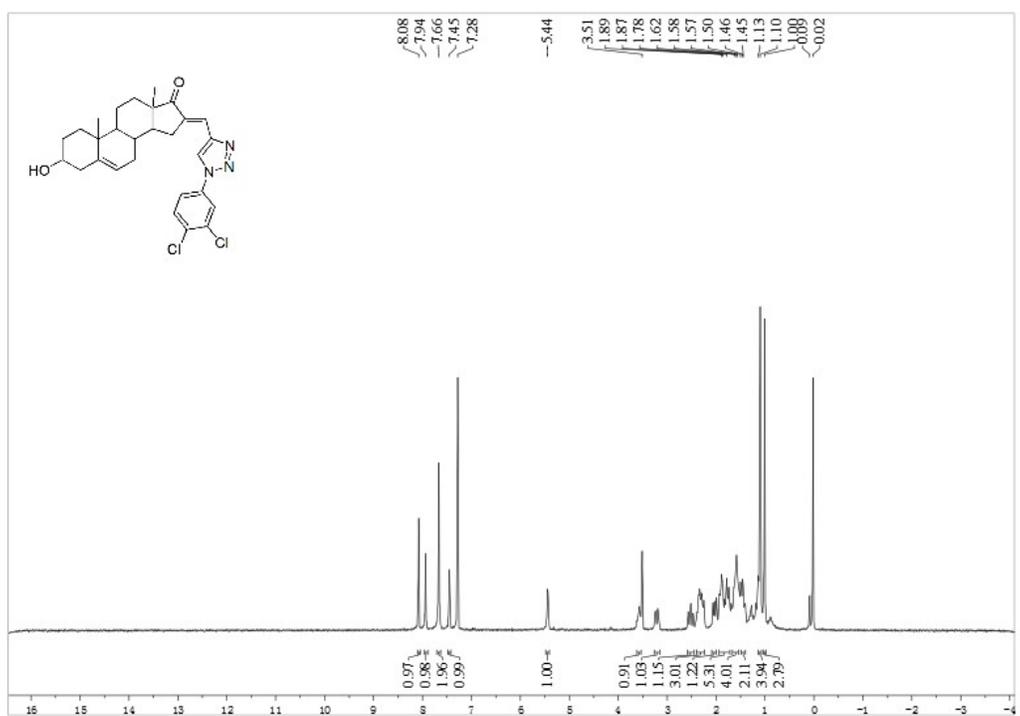
HRMS, HPLC: (E)-16-((1-(4-fluorophenyl)-1H-1,2,3-triazol-4-yl)methylene)-3-hydroxy-10,13-di-methyl-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2H-cyclopenta[a]phenanthren-17(14H)-one (2d)



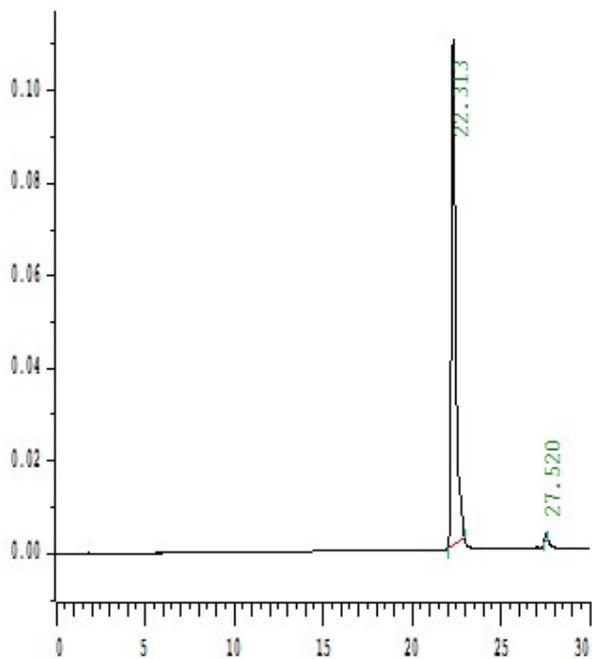
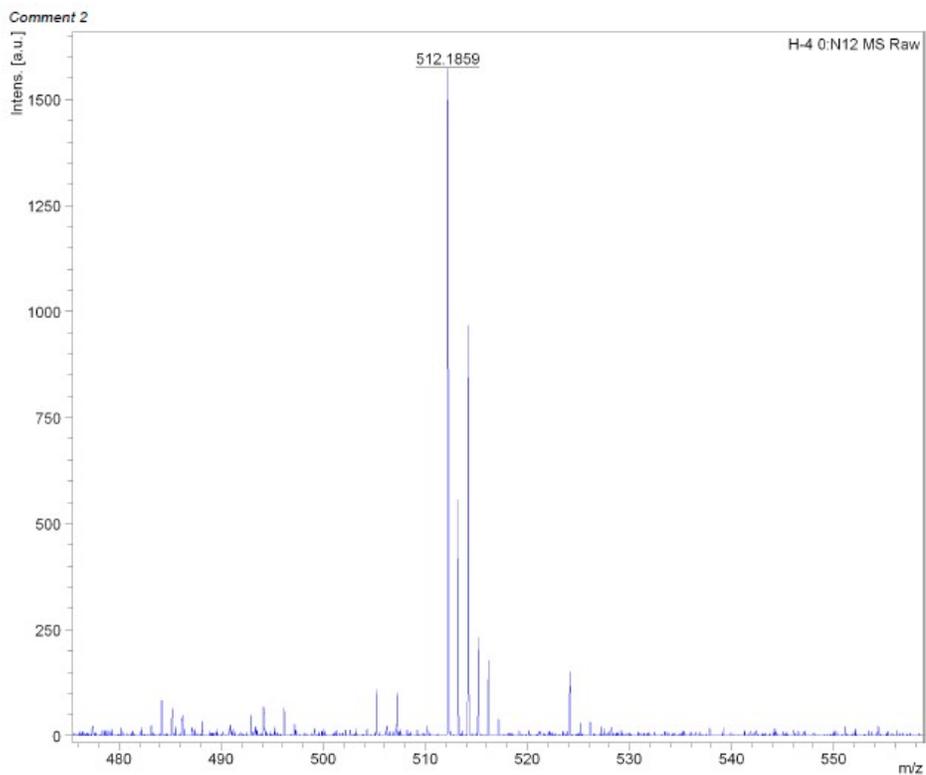
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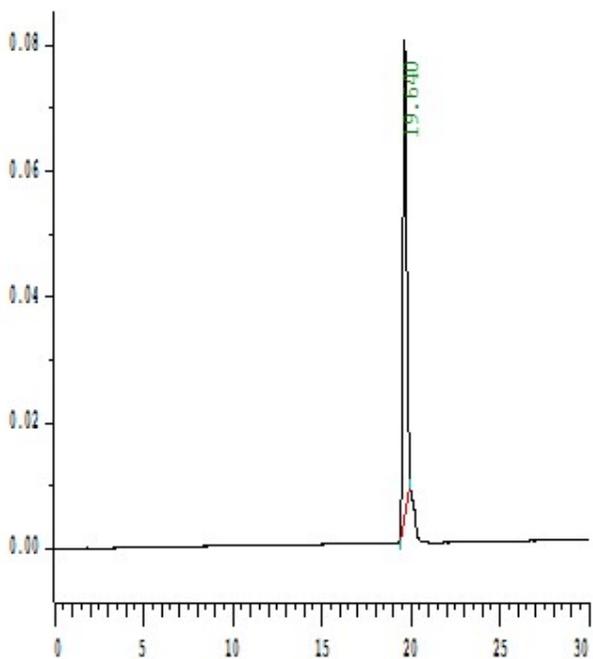
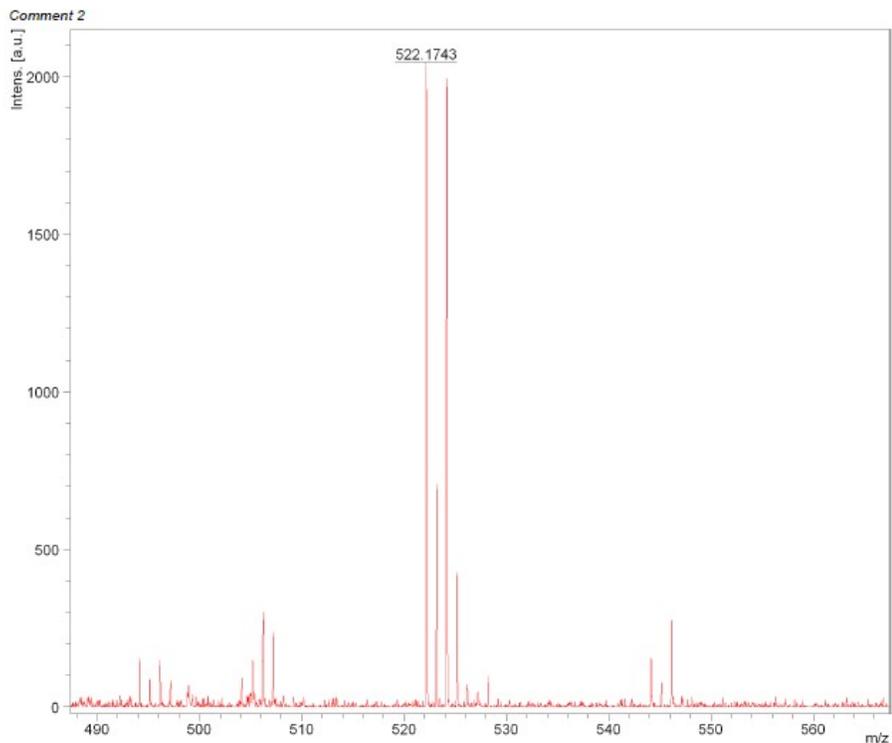
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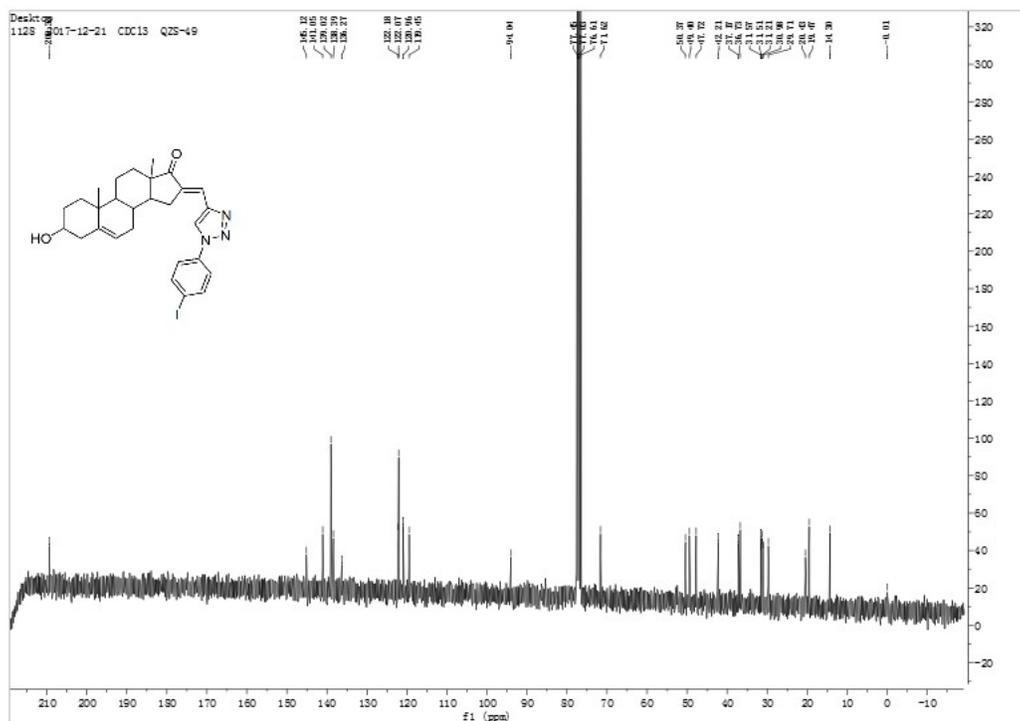
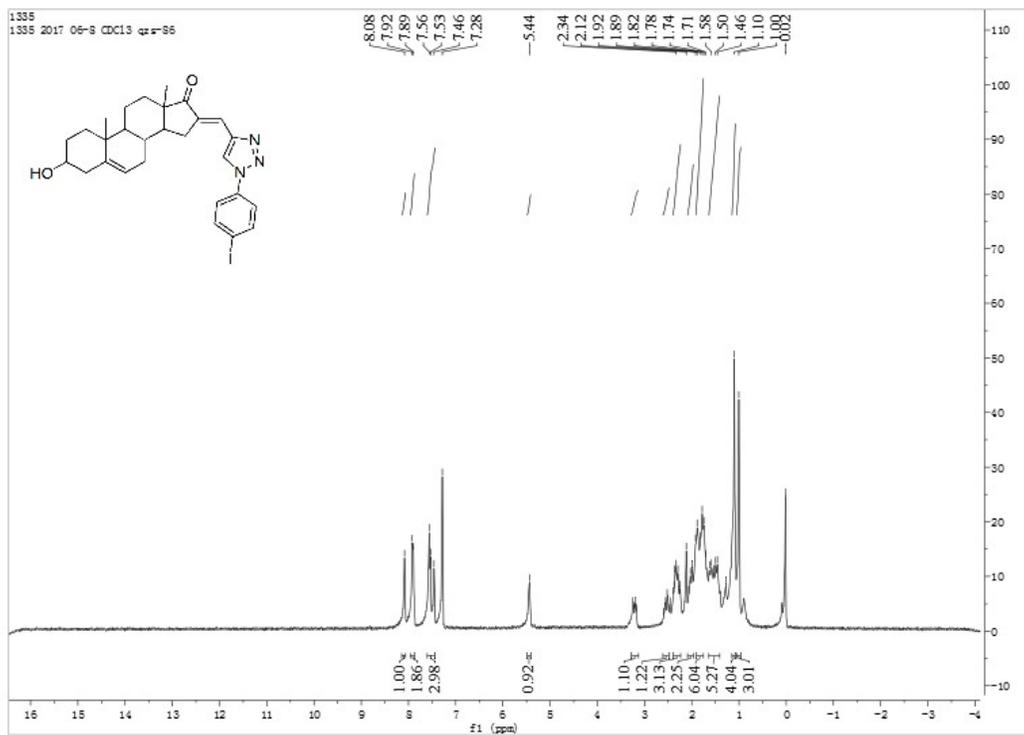
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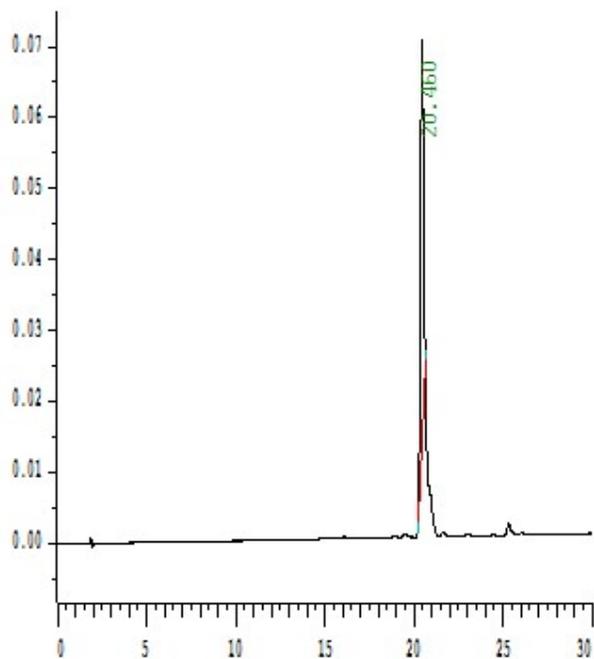
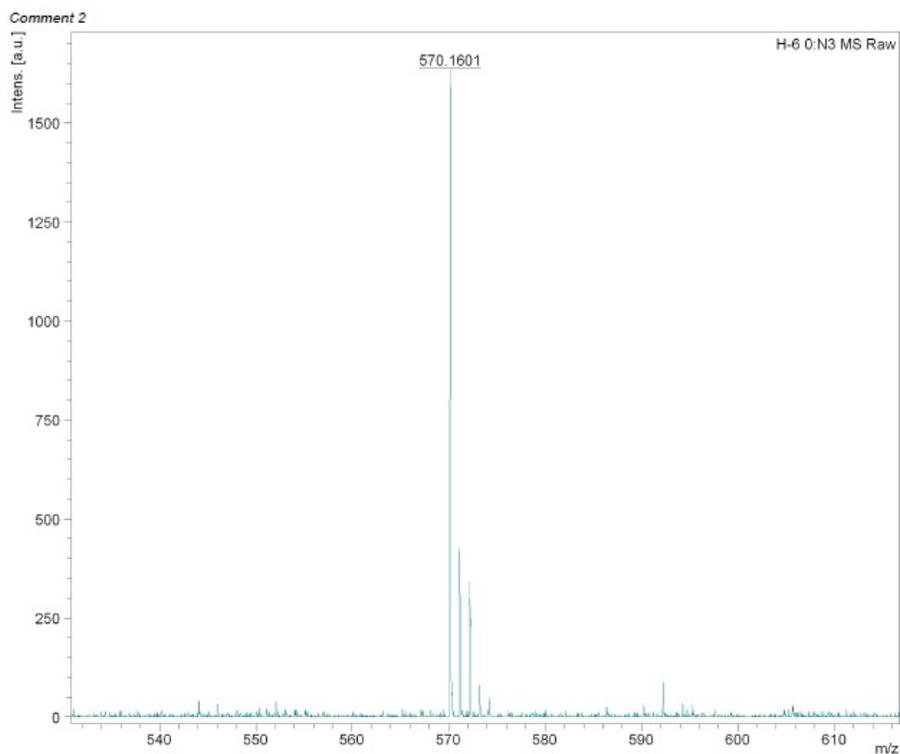
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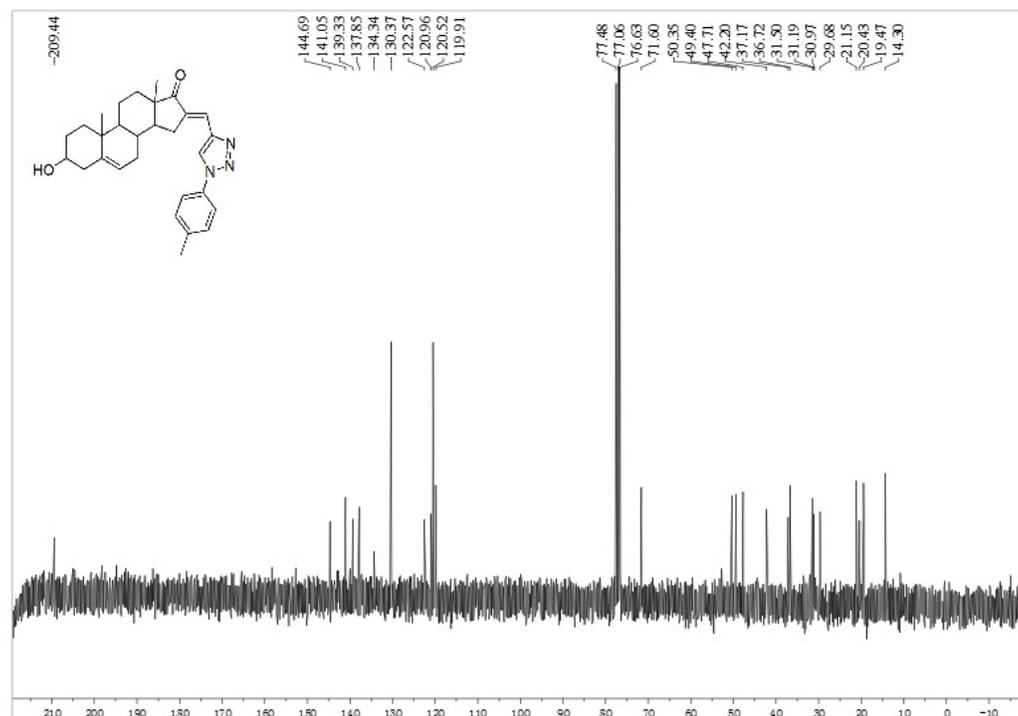
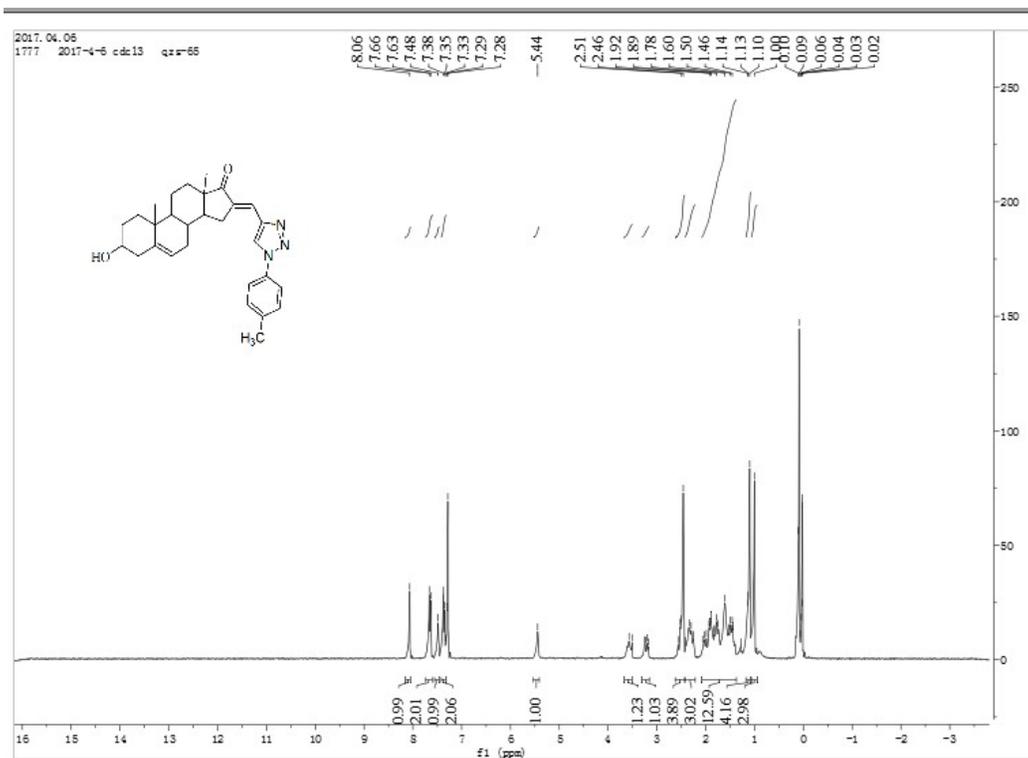
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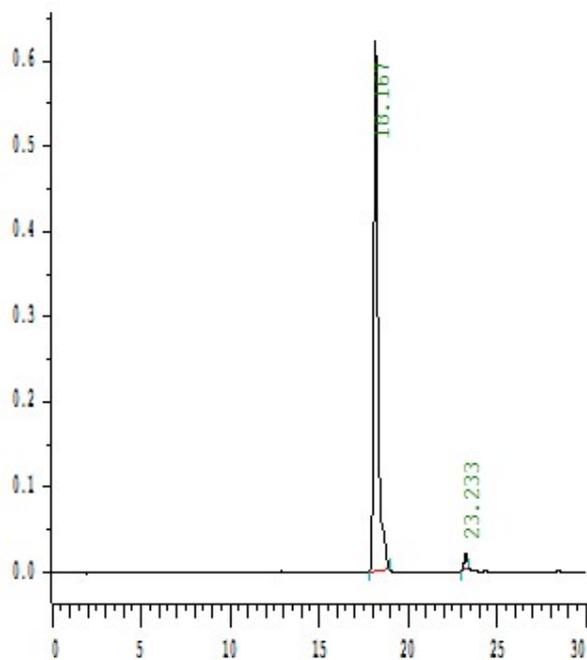
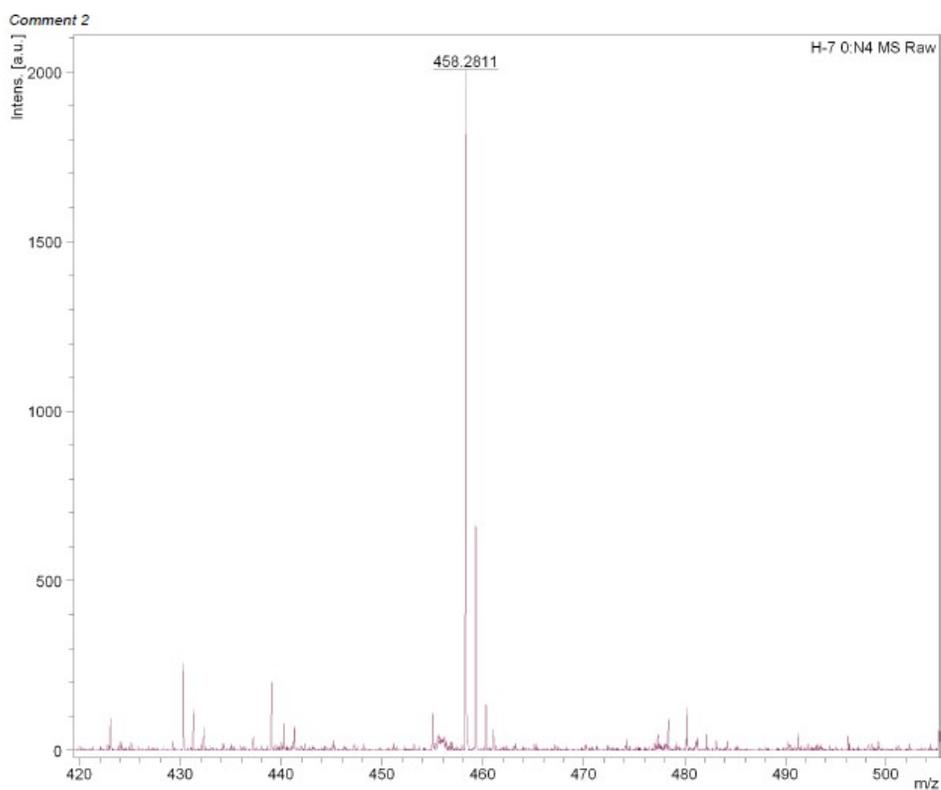
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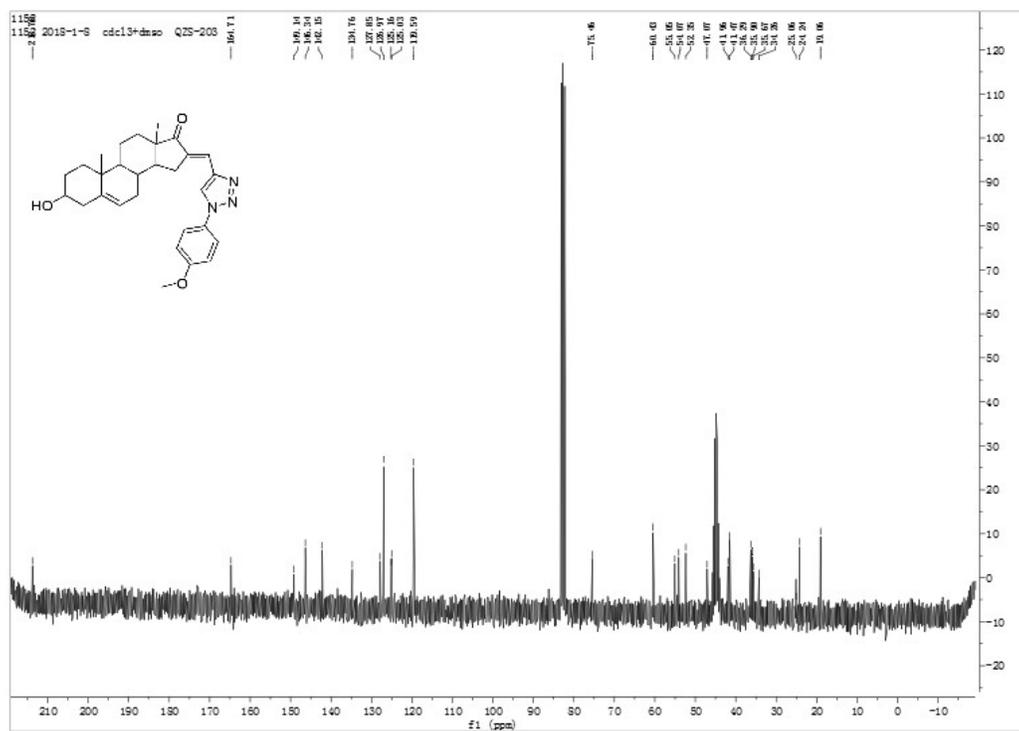
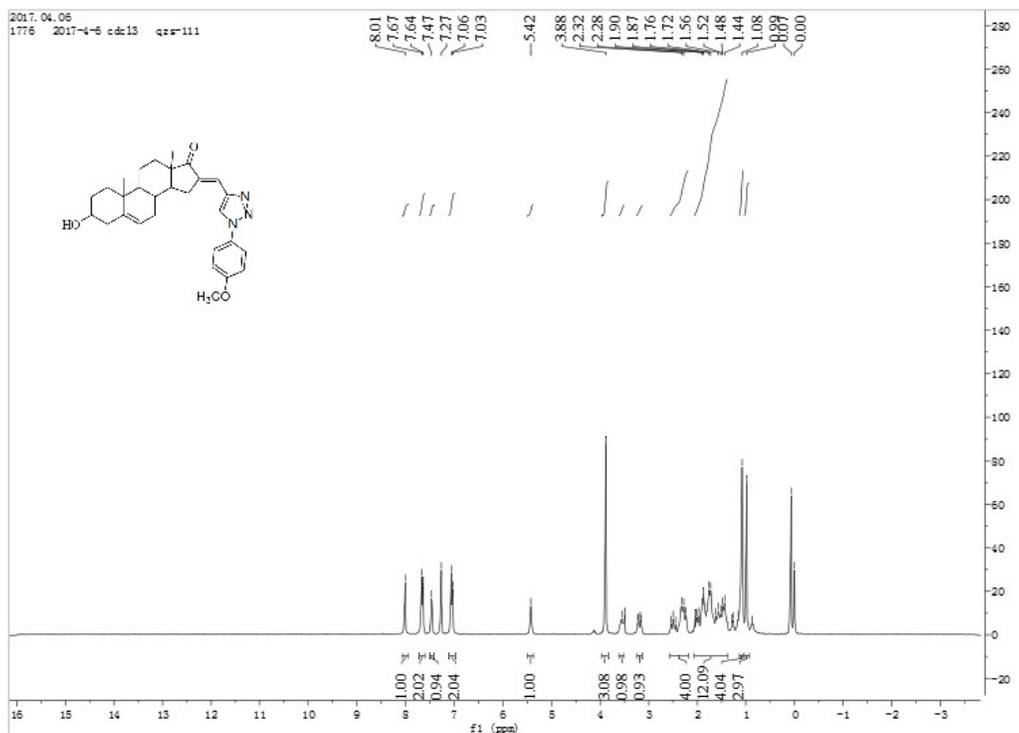
HRMS, HPLC: (*E*)-3-hydroxy-16-((1-(4-iodophenyl)-1*H*-1,2,3-triazol-4-yl)methylene)-10,13-dim-ethyl-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2*H*-cyclopenta[*a*]phenanthren-17(14*H*)-one (2n)



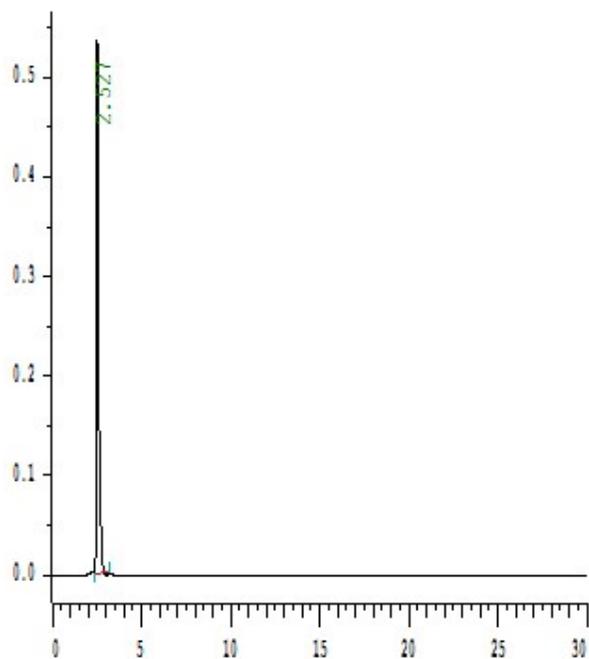
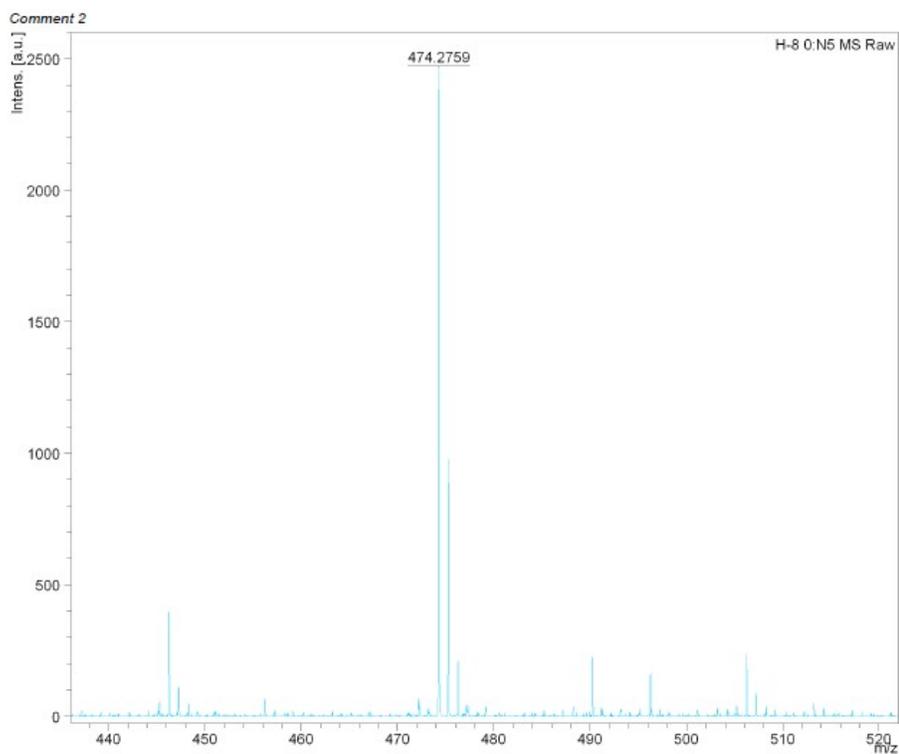
¹H-NMR, ¹³C-NMR: (*E*)-3-hydroxy-10,13-dimethyl-16-((1-*p*-tolyl-1*H*-1,2,3-triazol-4-yl)methylene)-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2*H*-cyclopenta[*a*]phenanthren-17(14*H*)-one (2p)



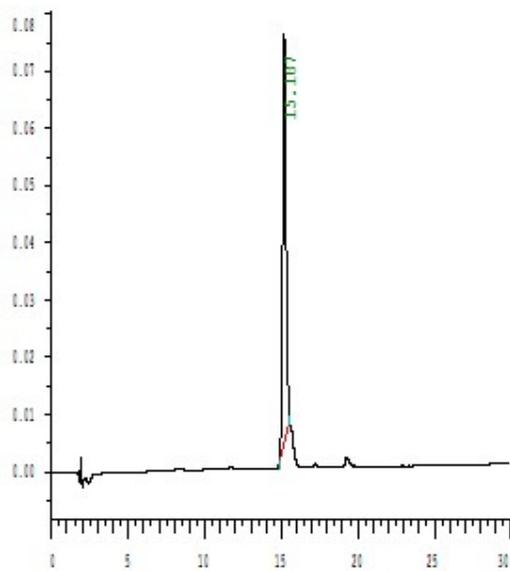
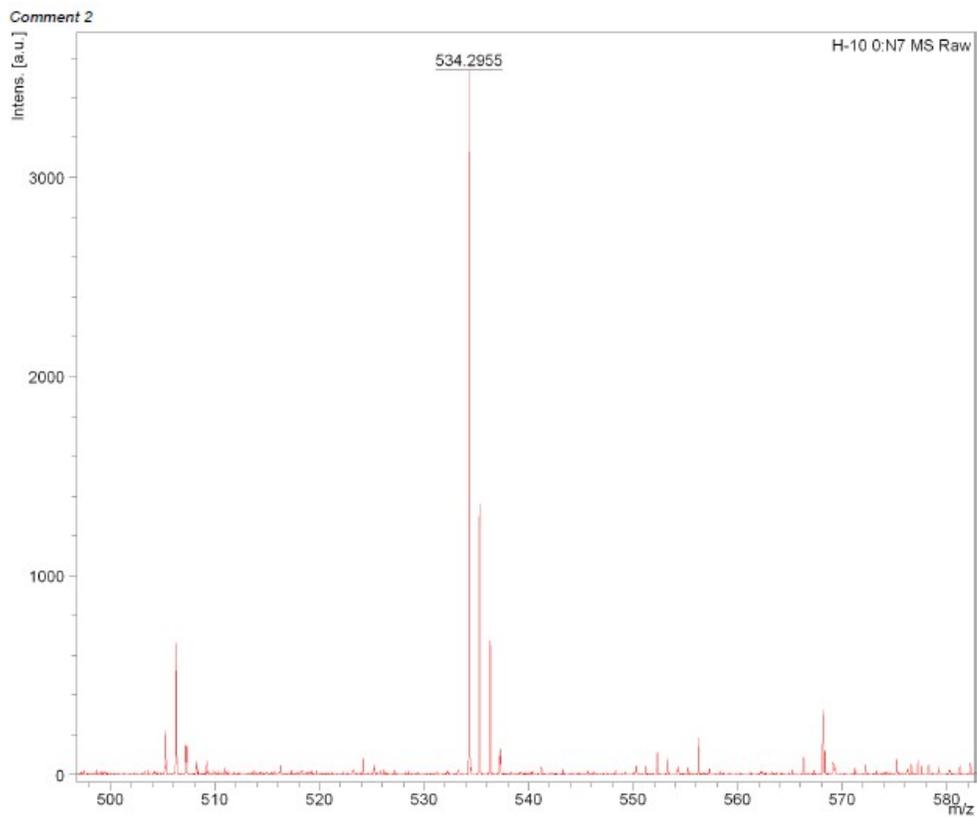
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¹H-NMR, ¹³C-NMR: (*E*)-3-hydroxy-16-((1-(4-methoxyphenyl)-1H-1,2,3-triazol-4-yl)methylene)-10,13-dimethyl-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2H-cyclopenta[a]phenanthren-17(14H)-one (2s)



HRMS, HPLC: (*E*)-3-hydroxy-16-((1-(4-methoxyphenyl)-1*H*-1,2,3-triazol-4-yl)methylene)-10,13-dimethyl-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2*H*-cyclopenta[*a*]phenanthren-17(14*H*)-one (2s)



HRMS,HPLC:(*E*)-3-hydroxy-10,13-dimethyl-16-((1-(3,4,5-trimethoxyphenyl)-1*H*-1,2,3-triazol-4-yl)methylene)-1,3,4,7,8,9,10,11,12,13,15,16-dodecahydro-2*H*-cyclopenta[*a*]phenanthren-17(14*H*)-one (2u)