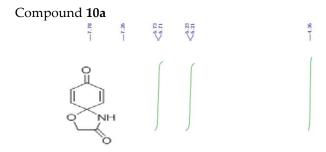
Synthesis and Antitumor Activity of a Series of Novel 1-Oxa-4-azaspiro[4,5]deca-6,9-diene-3,8-dione Derivatives

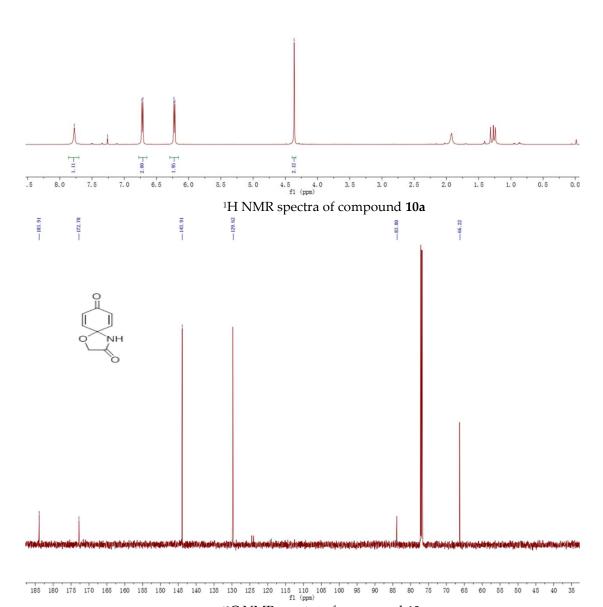
Ze Yang 1,2, Qiu Zhong 3, Shilong Zheng 3, Guangdi Wang 3,* and Ling He 1,*

- Key Laboratory of Drug-Targeting and Drug Delivery System of the Education Ministry, Department of Medicinal Chemistry, West China School of Pharmacy, Sichuan University, Chengdu, Sichuan 610041, China; 2016224055105@stu.scu.edu.cn
- ² Sichuan Engineering Laboratory for Plant-Sourced Drug and Sichuan Research Center for Drug Precision Industrial Technology, Department of Medicinal Chemistry, West China School of Pharmacy, Sichuan University, Chengdu, Sichuan 610041, China
- ³ Department of Chemistry, RCMI Cancer Research Center, Xavier University of Louisiana, New Orleans, LA 70125, USA; qzhong@xula.edu (Q.Z.); szheng@xula.edu (S.Z.)
- * Correspondence: gwang@xula.edu (G.W.); heling2012@scu.edu.cn. (L.H.)

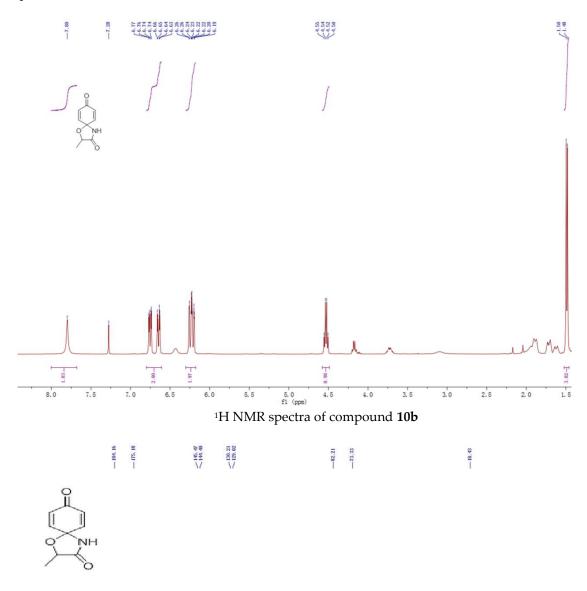
(Supporting Information)

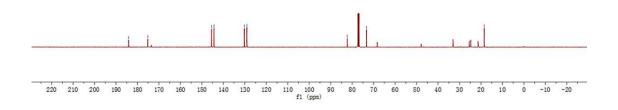
1 H and 13 C NMR spectra of compounds 10a–10b	-S2–S3
1H and ^{13}C NMR spectra of compounds $\mathbf{11a-11k}$	-S4–S14
¹ H and ¹³ C NMR spectra of compounds 12a–12d	-S15–S18



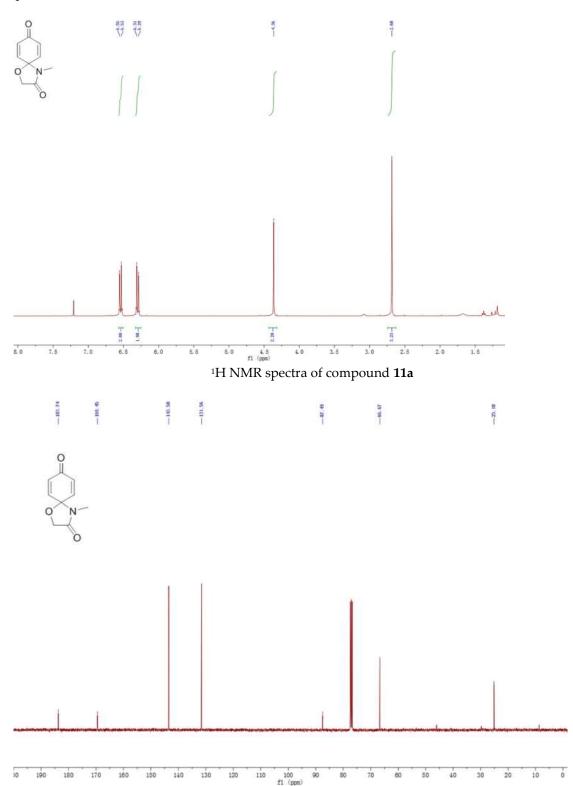


Compound 10b

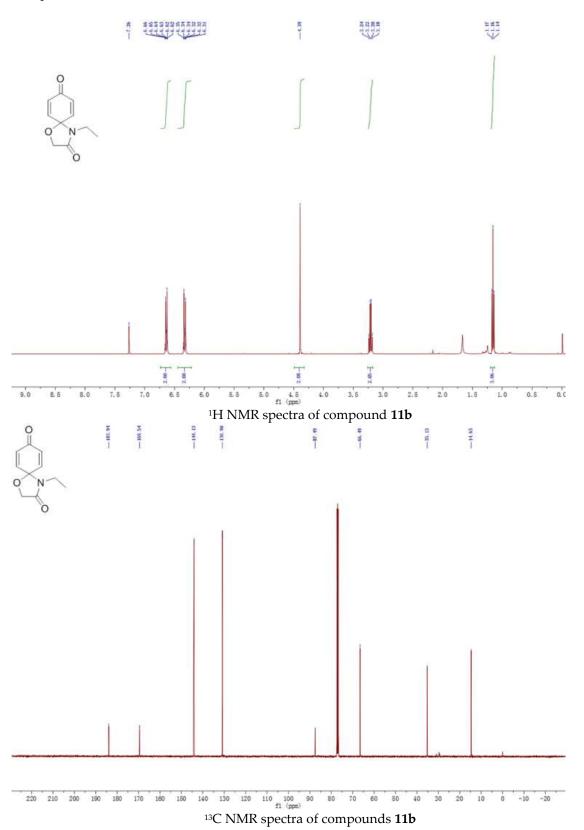


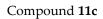


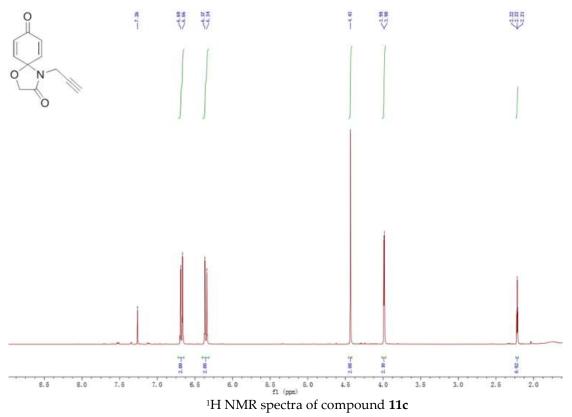
Compound 11a



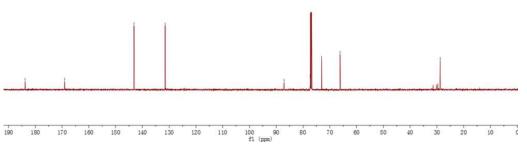
Compound 11b





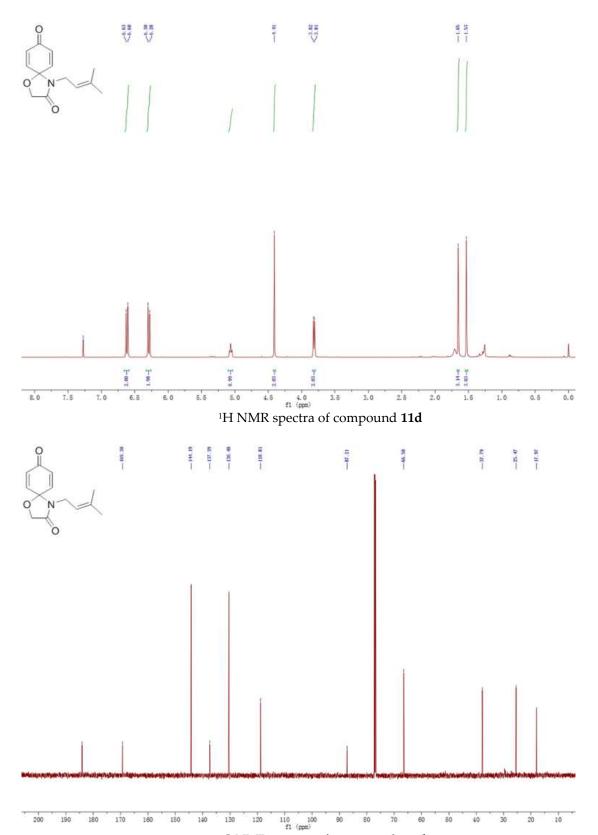






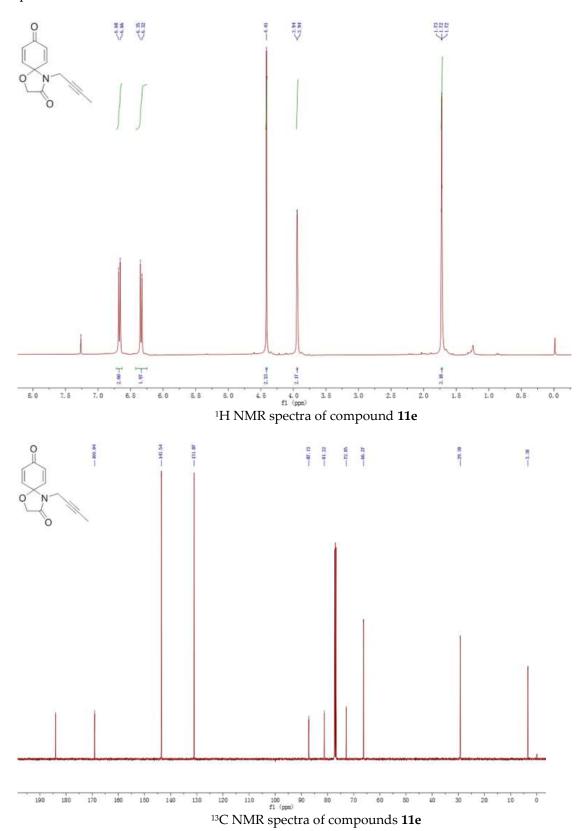
¹³C NMR spectra of compounds **11c**

Compound 11d

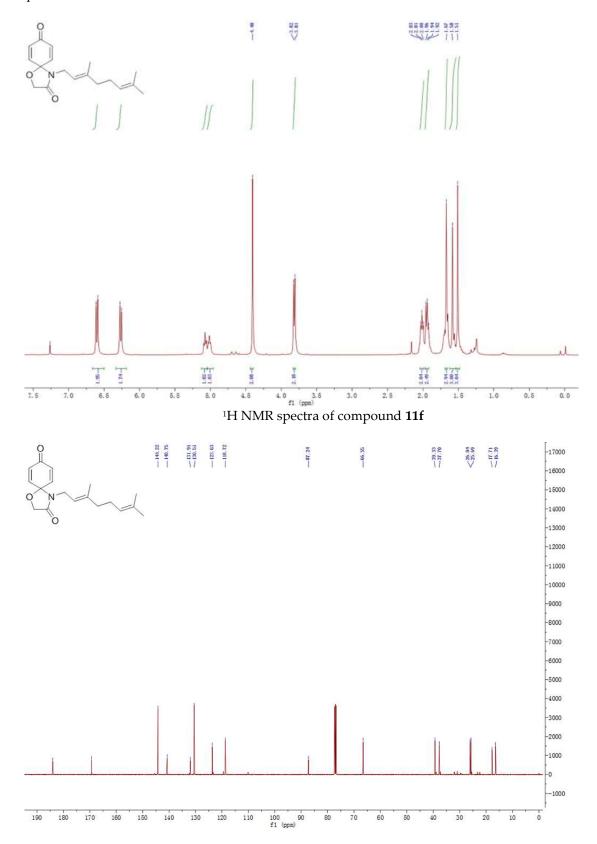


¹³C NMR spectra of compounds **11d**

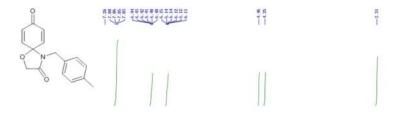
Compound 11e

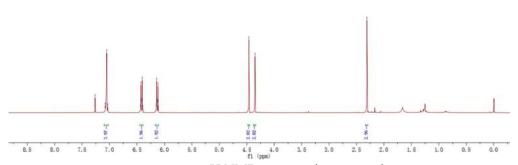


Compound 11f



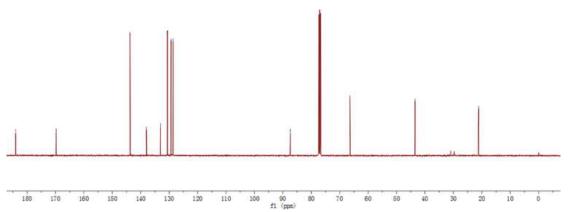
Compound 11g





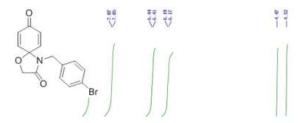
¹H NMR spectra of compound **11g**

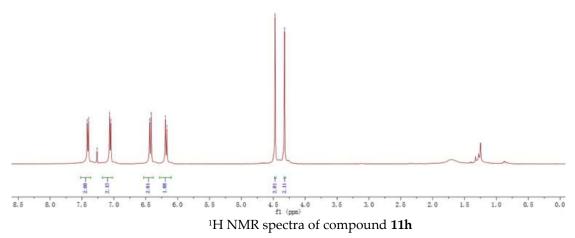


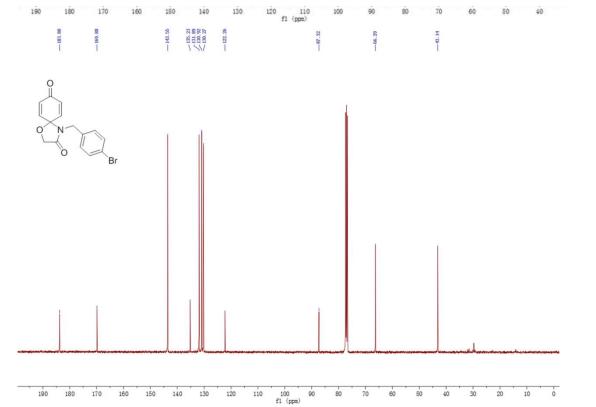


¹³C NMR spectra of compounds **11g**

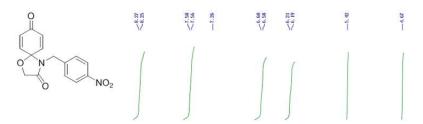
Compound 11h

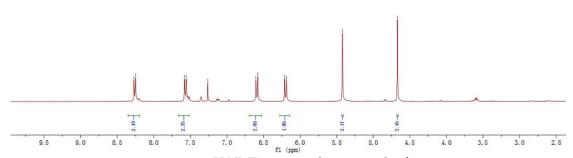




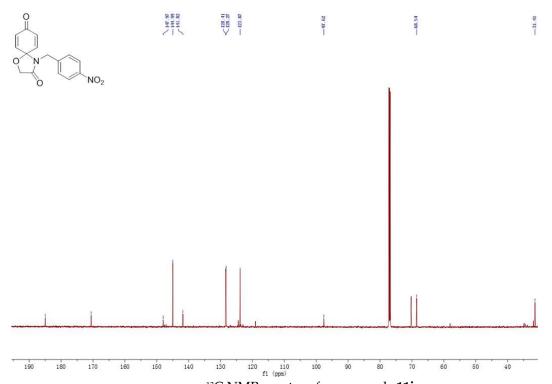


Compound 11i



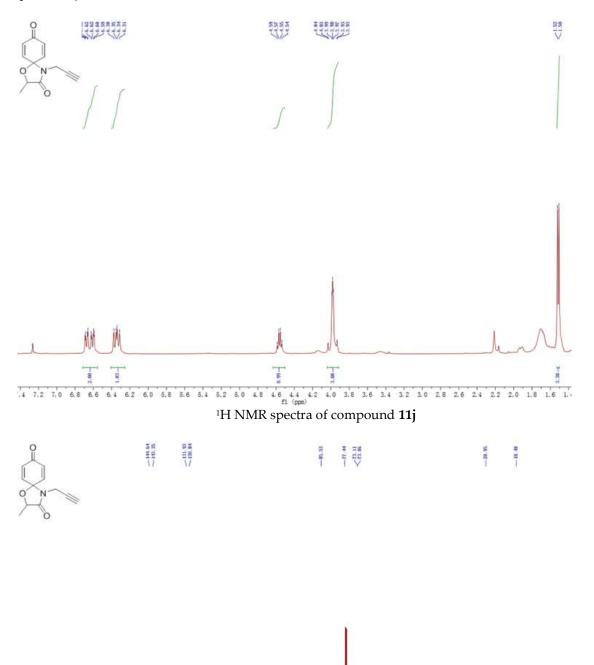


¹H NMR spectra of compound **11i**



¹³C NMR spectra of compounds **11i**

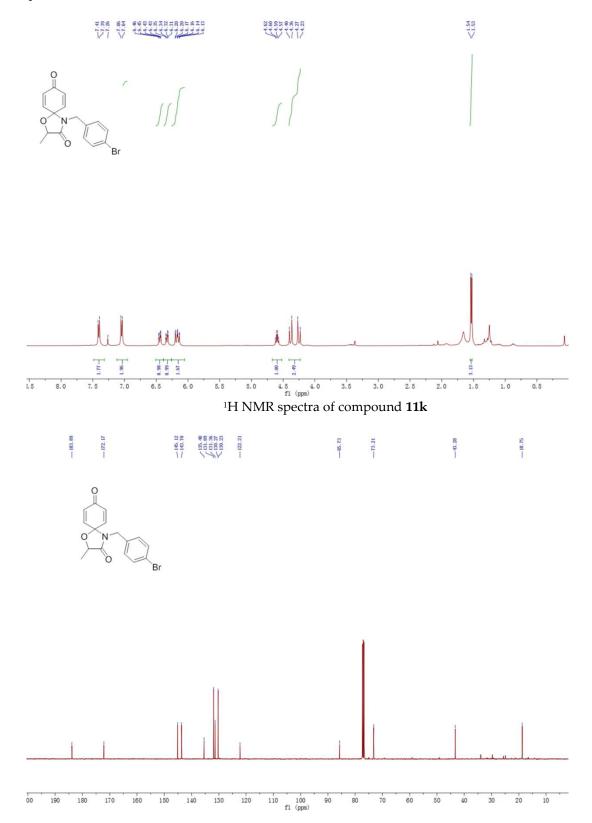
Compound **11**j



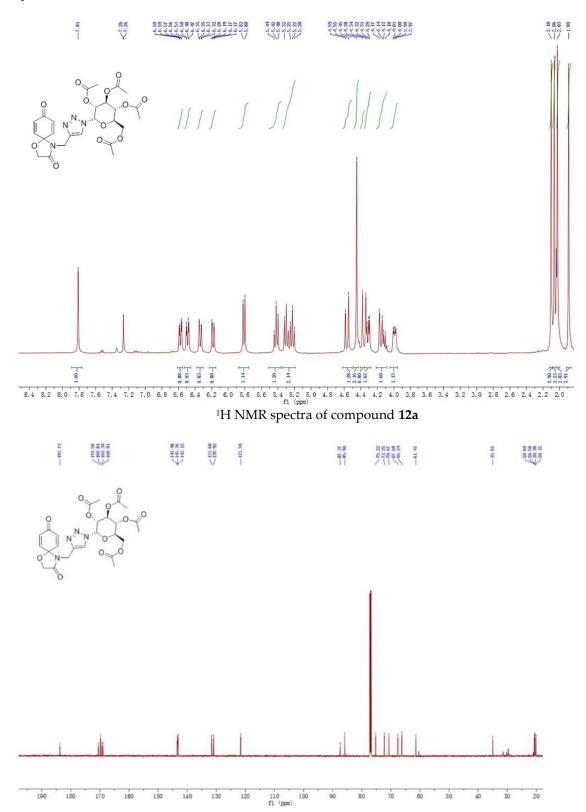


140

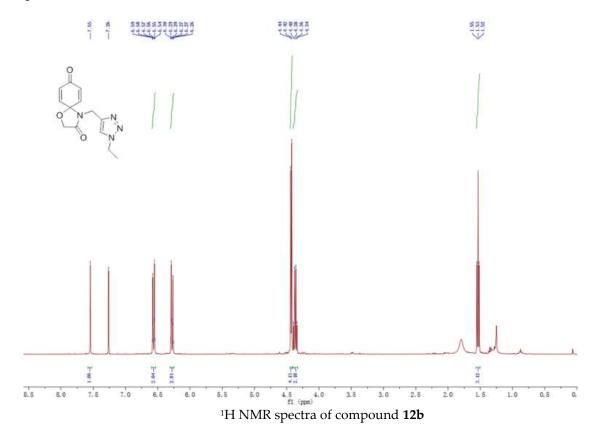
Compound 11k



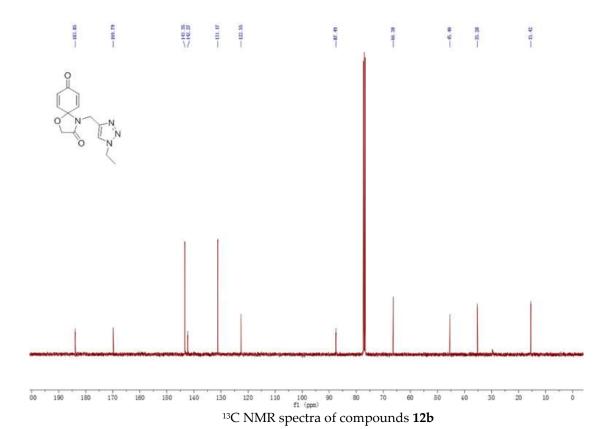
Compound 12a



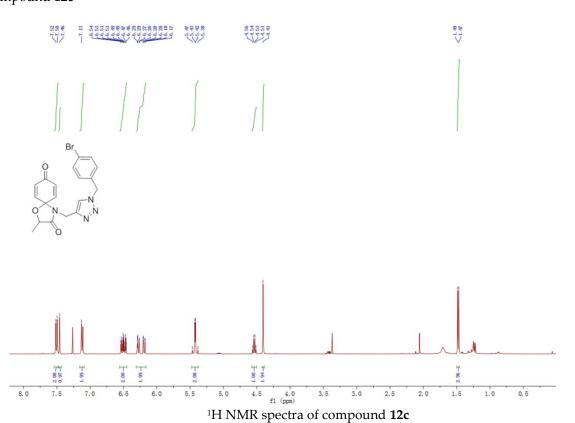
Compound 12b



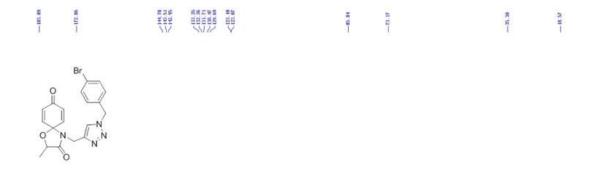
S16

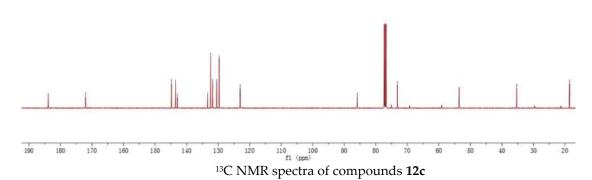


Compound 12c

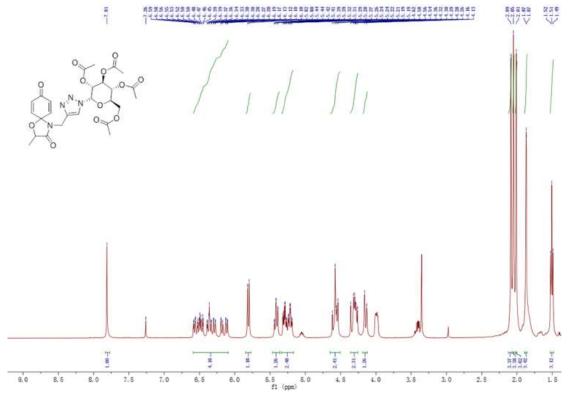


S17

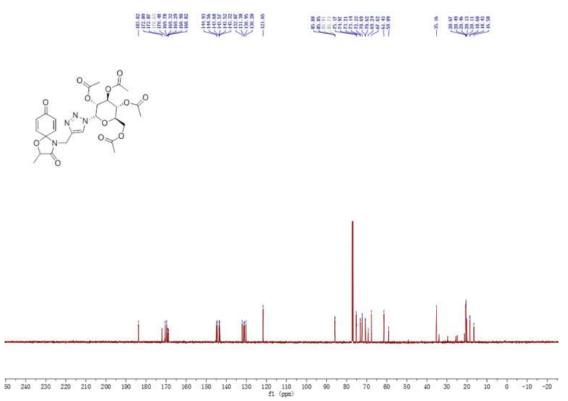




Compound 12d



¹H NMR spectra of compound **12d**



¹³C NMR spectra of compounds **12d**