Supporting information

Investigation of novel Indoline azo disperse dyes: synthesis, DFT simulation, and dyeing performance on PET and PA fabrics

Xiyu Song, *[a] Mingda Li, [a] Chuang Dai, [a] Jingyi Li,[b] Yu Wang, [a] Aiqin Hou[b] and Hongfei Qian[a]

a. *Key Laboratory of Clean Dyeing and Finishing Technology of Zhejiang Province, Shaoxing University, Shaoxing 312000, China*

b. *College of Chemistry and Chemical Engineering, Donghua University, Shanghai 201620, P R China*

* *Corresponding author. E-mail address: xiyusong@usx.edu.cn (Xiyu Song)*

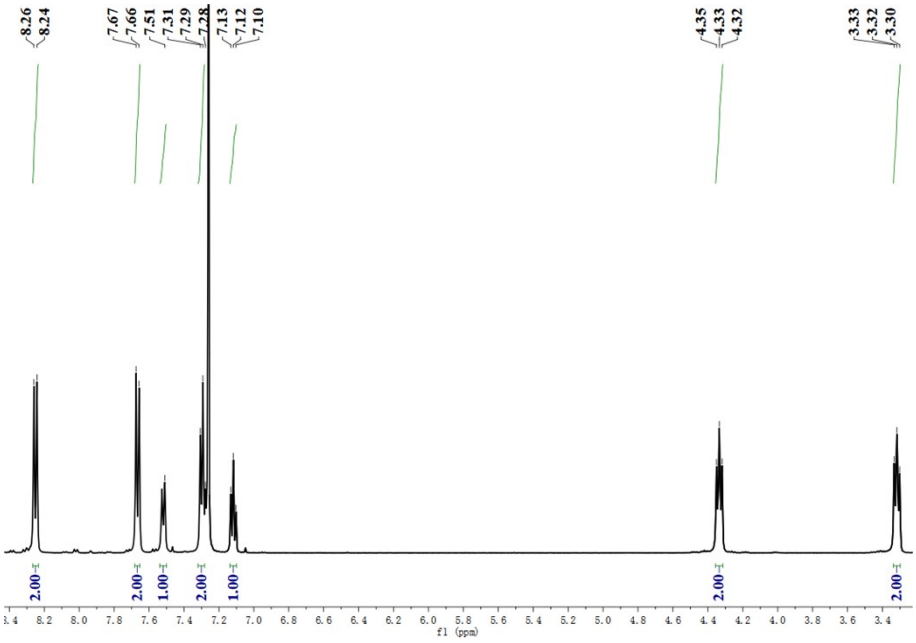

Fig. S1. ^{1}H-NMR spectrum of D1

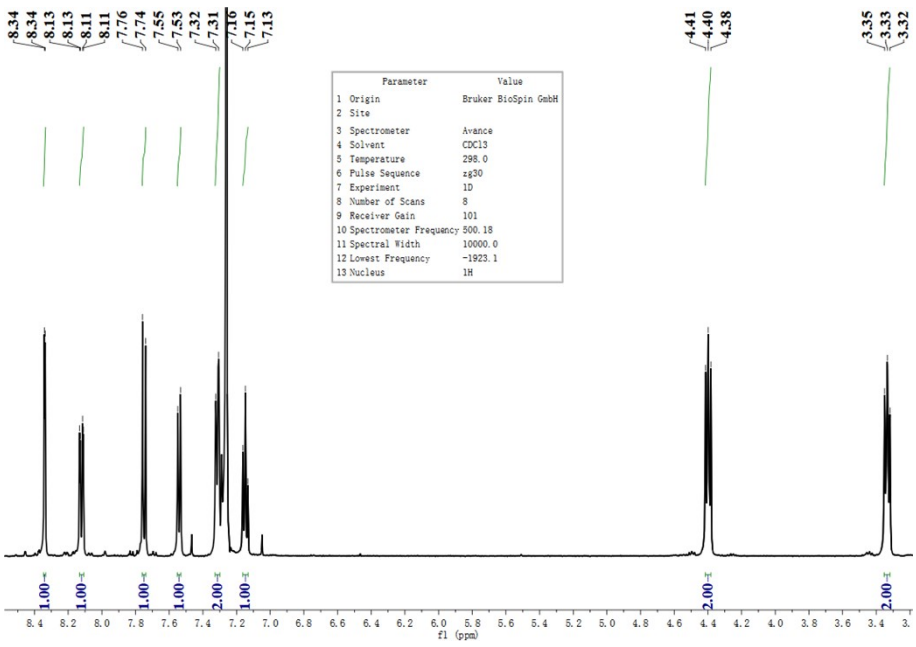

Fig. S2. ^{1}H-NMR spectrum of D2

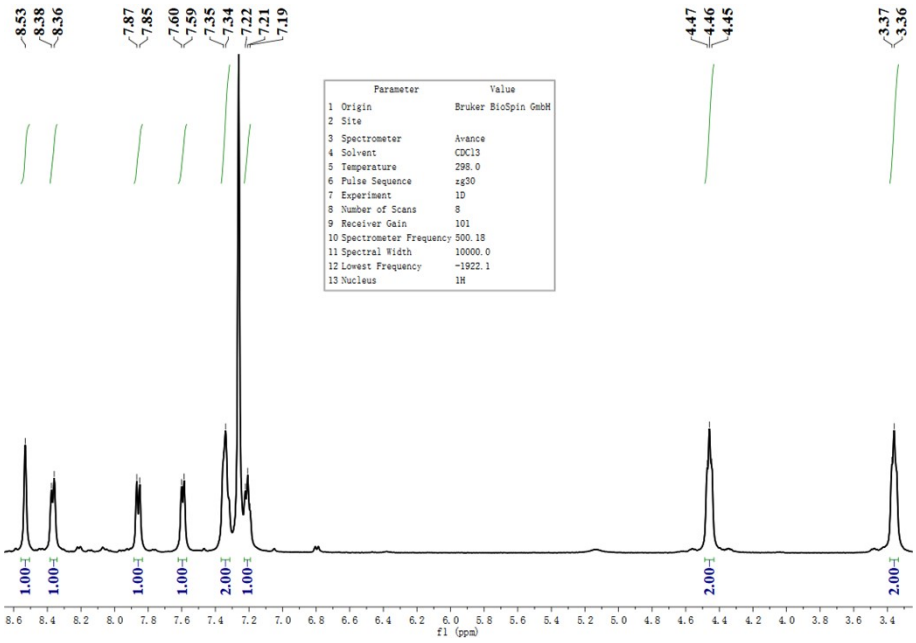

Fig. S3. ^{1}H-NMR spectrum of D3

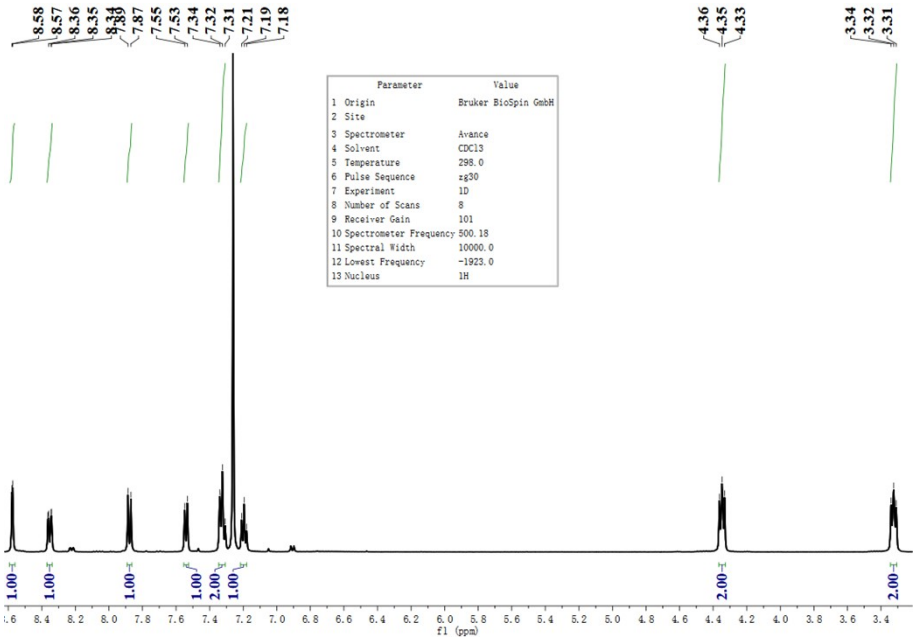

Fig. S4. ^{1}H-NMR spectrum of D4

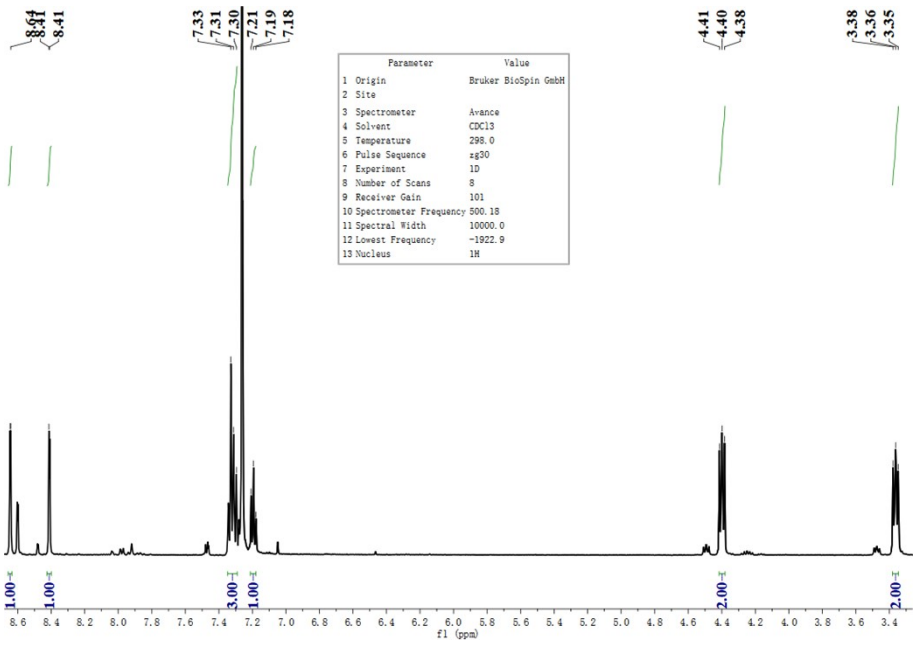

Fig. S5. ^{1}H-NMR spectrum of D5

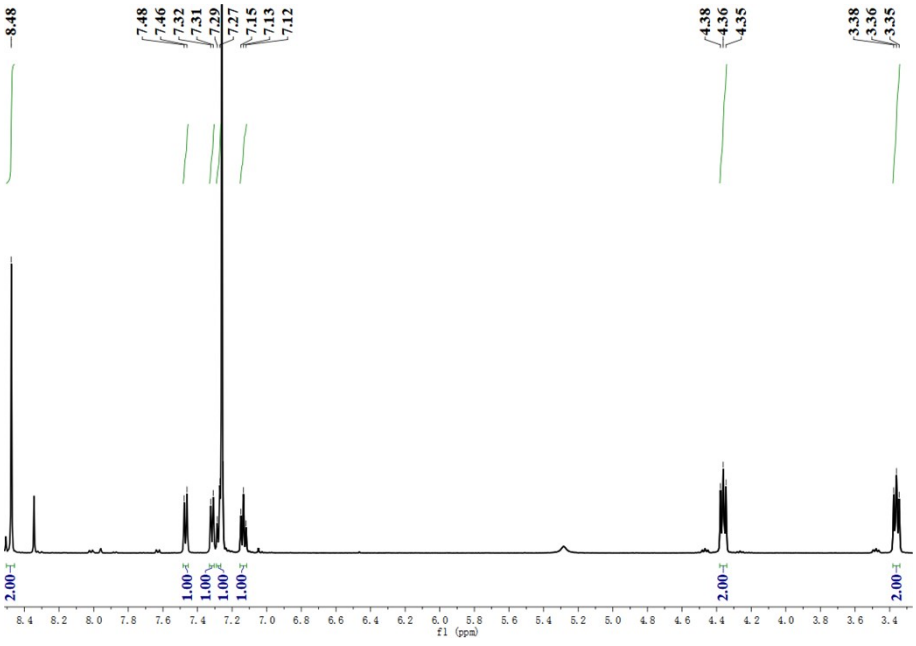

Fig. S6. ^{1}H-NMR spectrum of D6

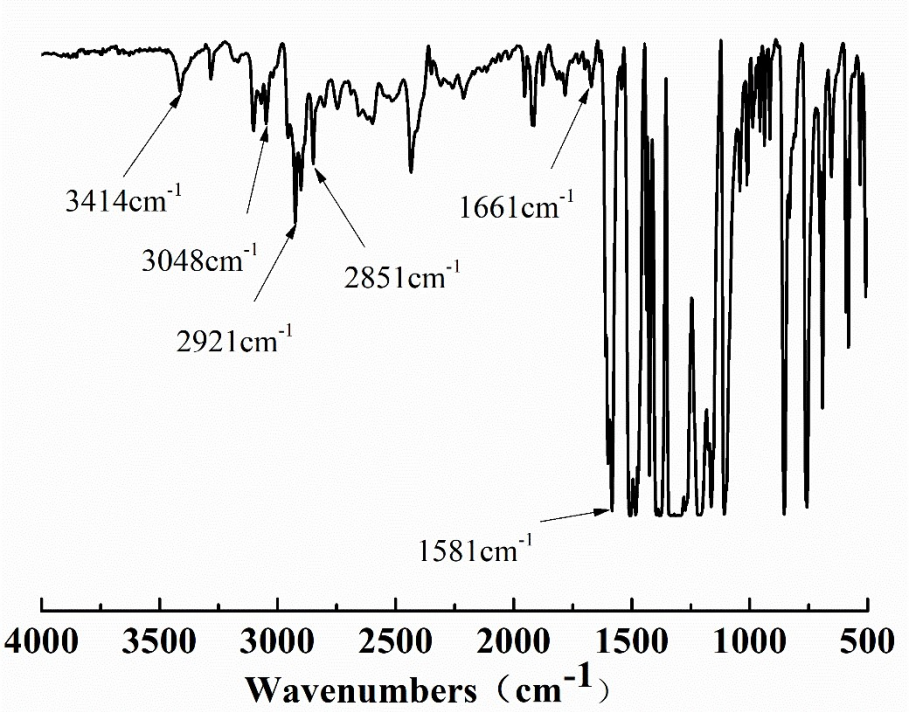

Fig. S7. FTIR spectrum of D1

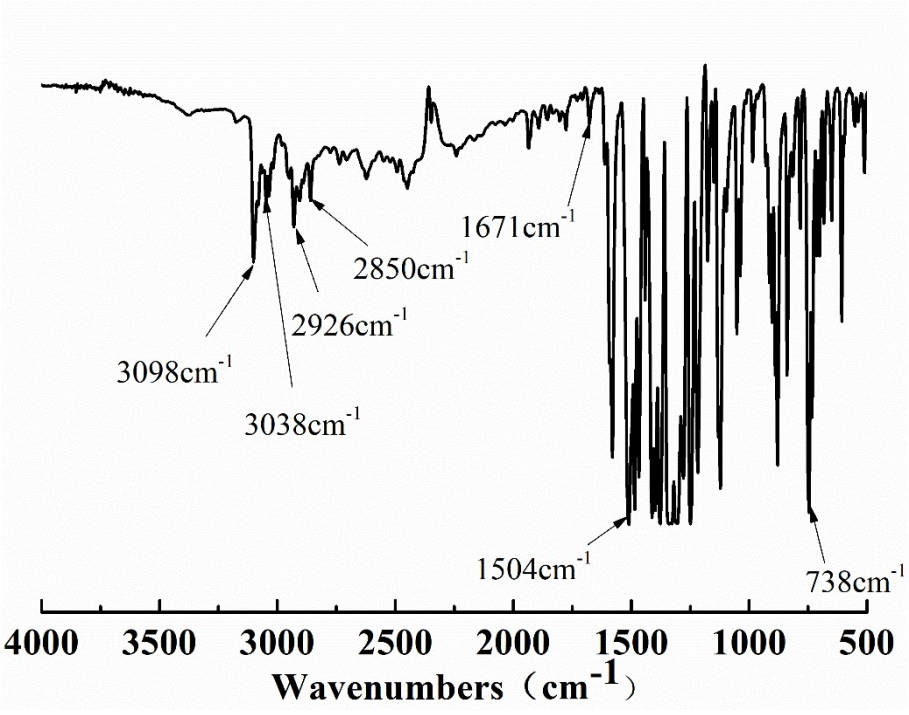

Fig. S8. FTIR spectrum of D2

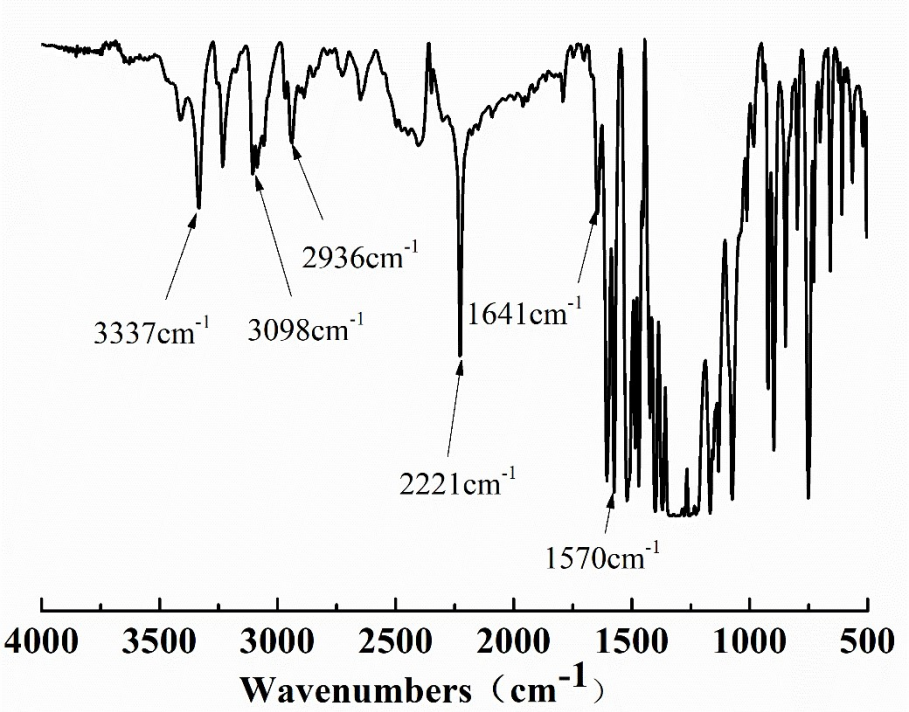

Fig. S9. FTIR spectrum of D3

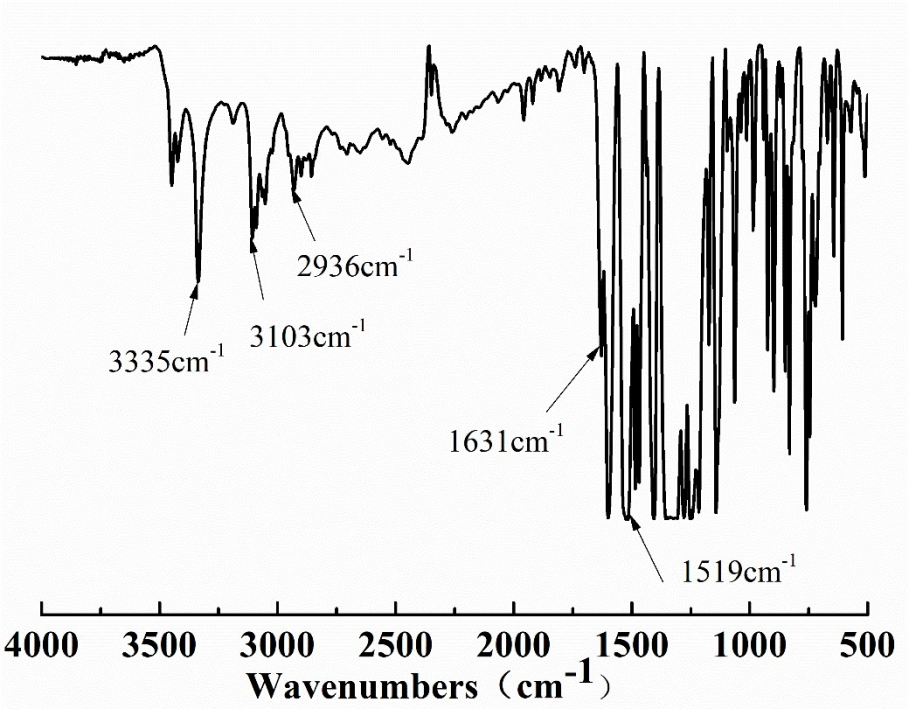

Fig. S10. FTIR spectrum of D4

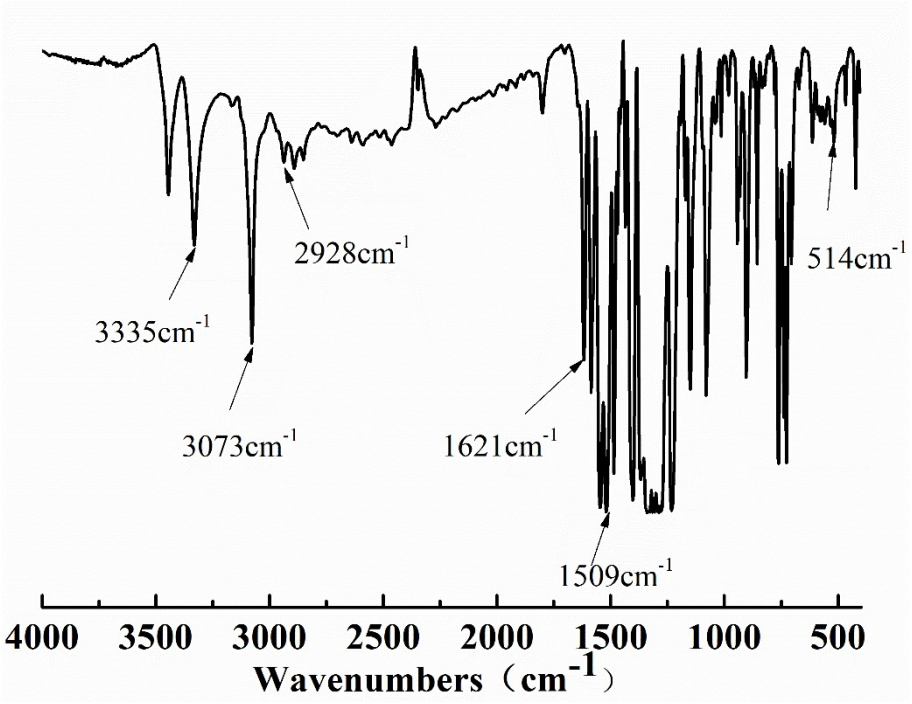

Fig. S11. FTIR spectrum of D5

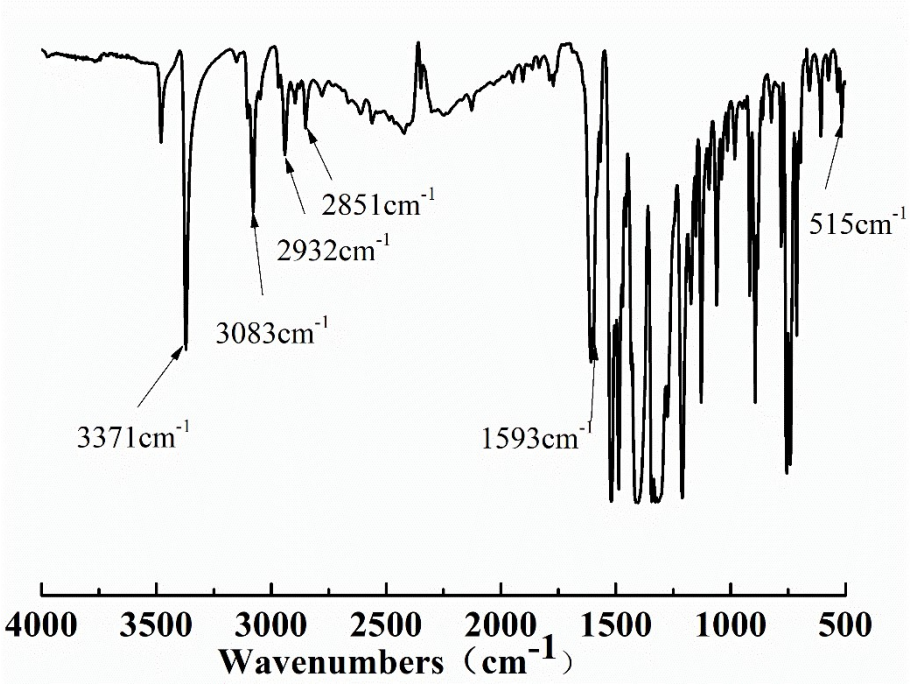

Fig. S12. FTIR spectrum of D6

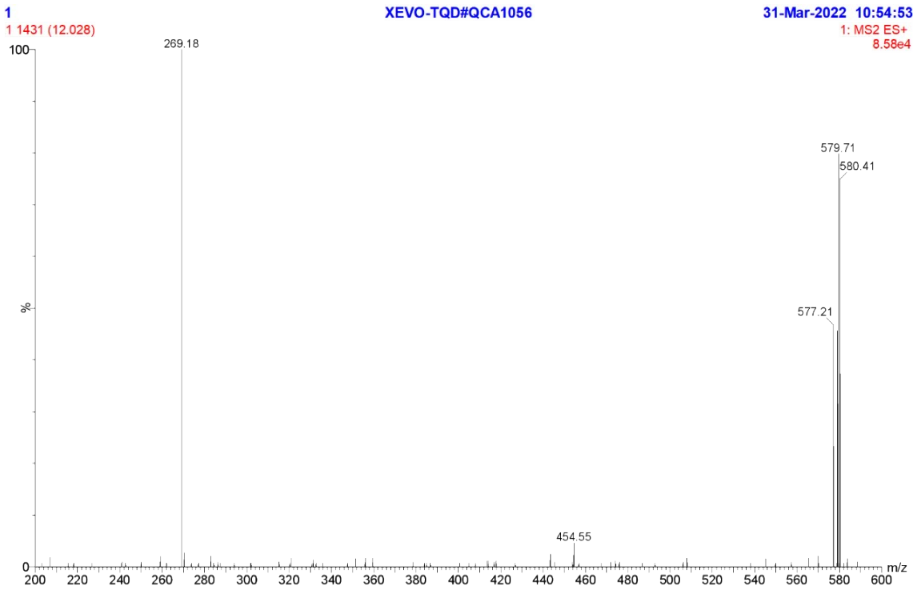

Fig. S13. MS spectrum of D1

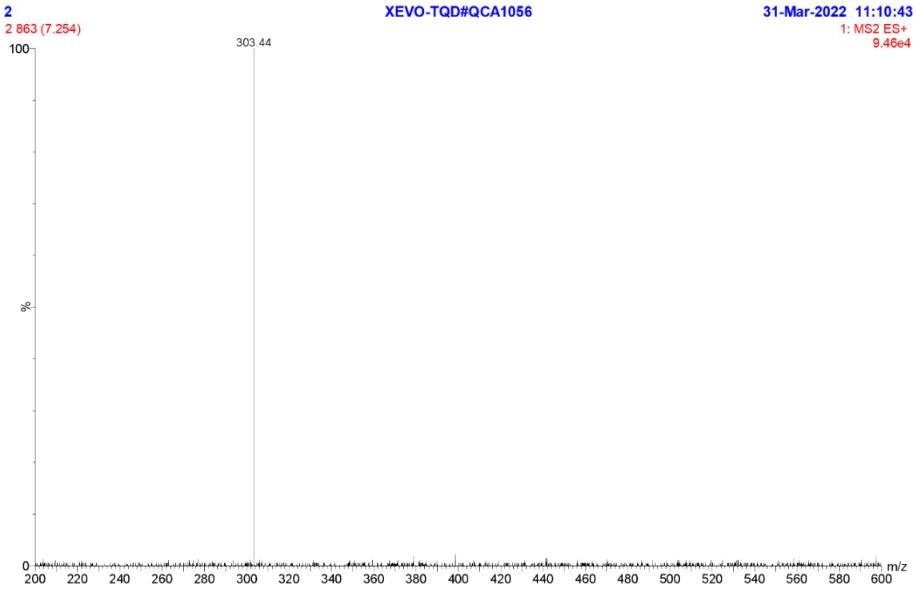

Fig. S14. MS spectrum of D2

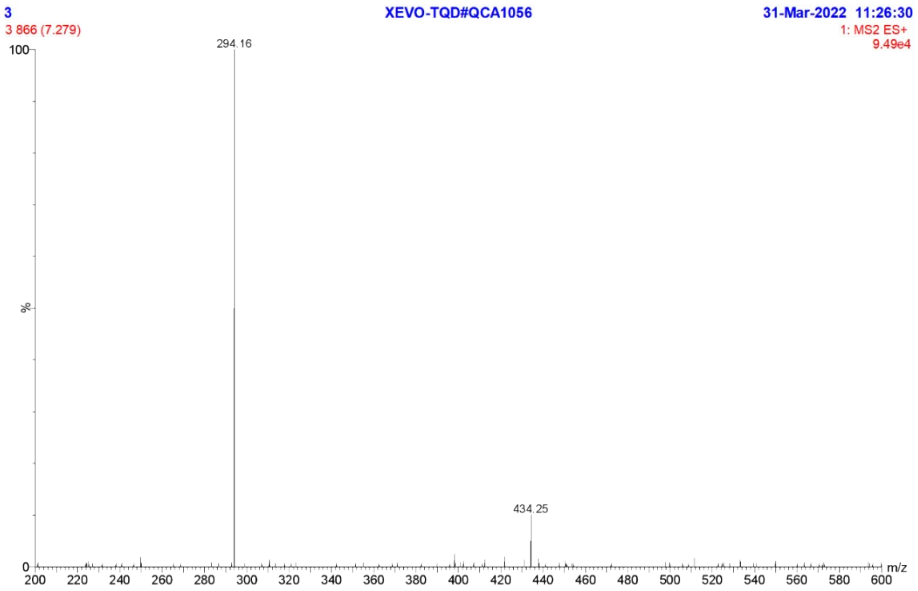

Fig. S15. MS spectrum of D3

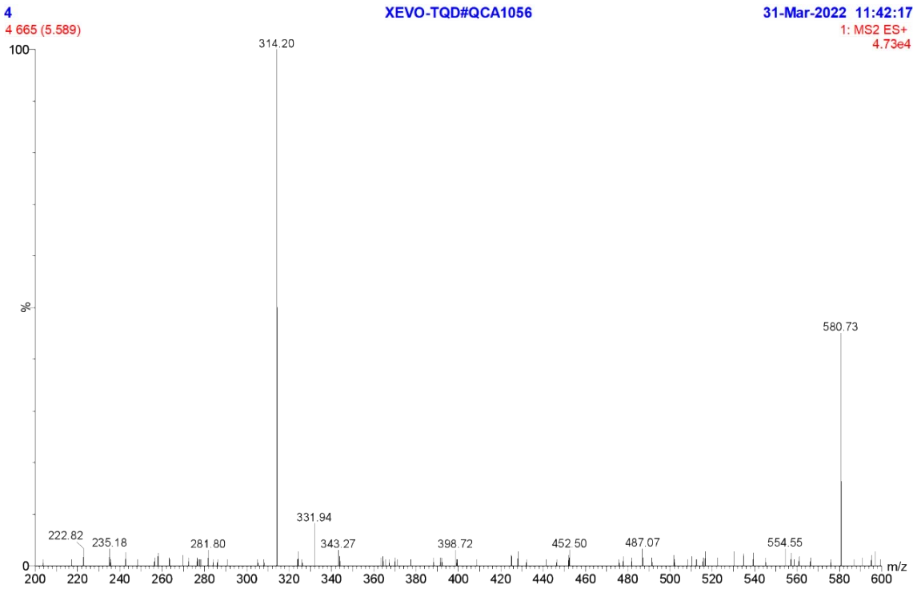

Fig. S16. MS spectrum of D4

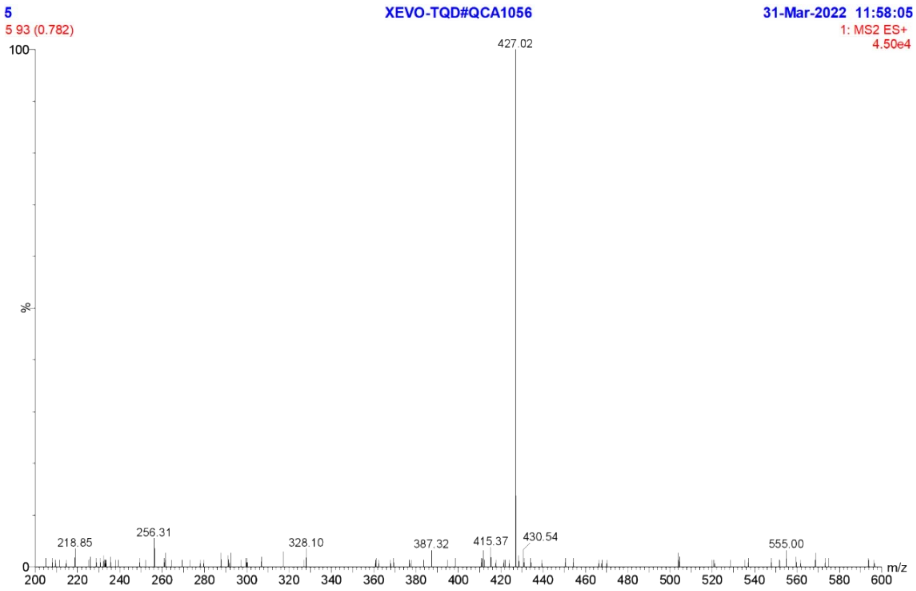

Fig. S17. MS spectrum of D5

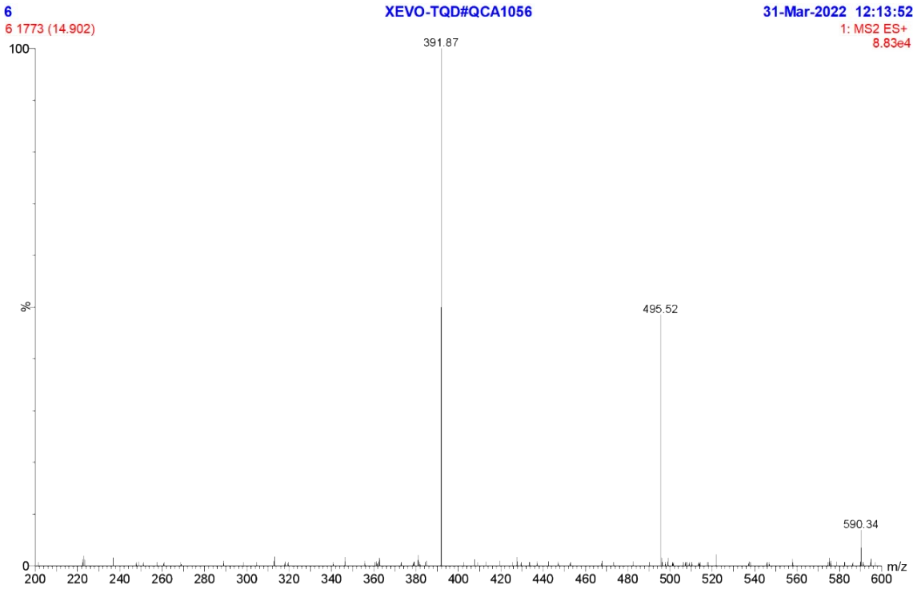

Fig. S18. MS spectrum of D6