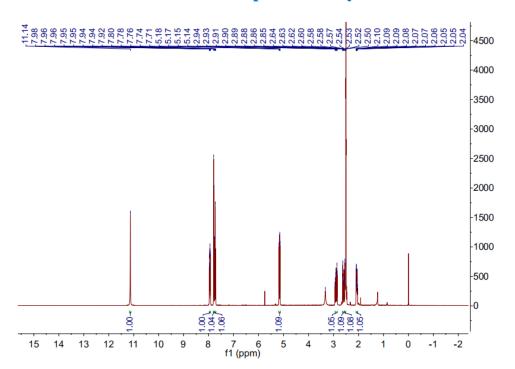
Supplemental information

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- S1. The ¹H-NMR spectra of key intermediates.
- S2. The ¹H-NMR and ¹³C-NMR spectra of final compounds.
- **S3. The HRMS spectra of final compounds.**



S1. The ¹H-NMR spectra of key intermediates.

Figure S1. The ¹H-NMR spectrum of Compd. 2

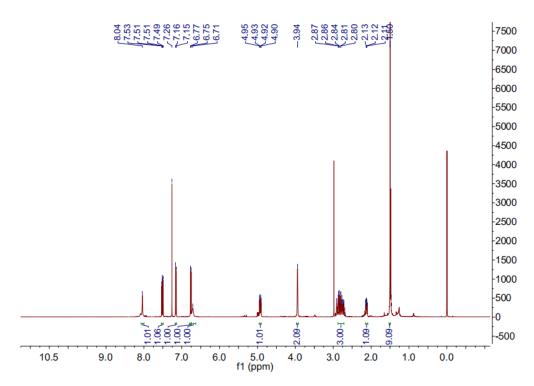


Figure S2. The ¹H-NMR spectrum of Compd. 3

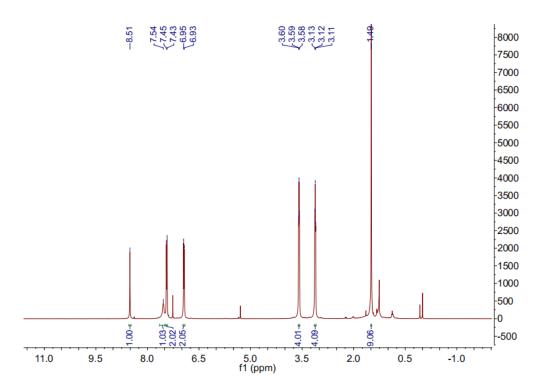


Figure S3. The ¹H-NMR spectrum of Compd. 10

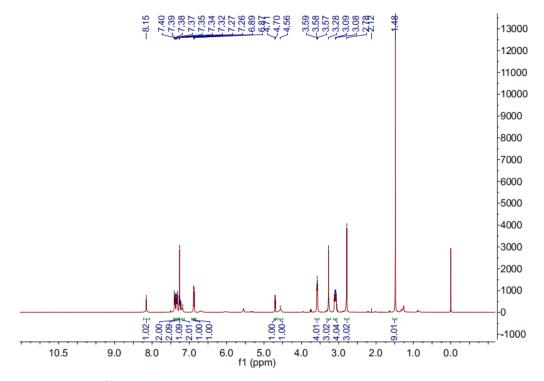


Figure S4. The ¹H-NMR spectrum of Compd. 11

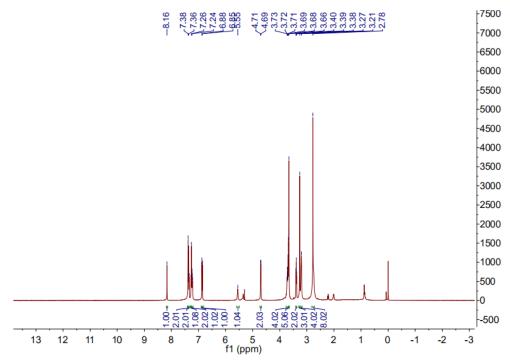


Figure S5. The ¹H-NMR spectrum of Compd. 13

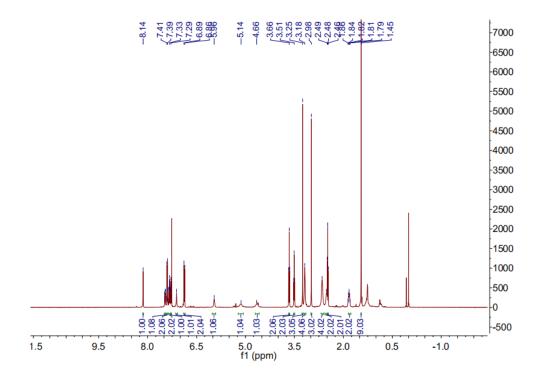
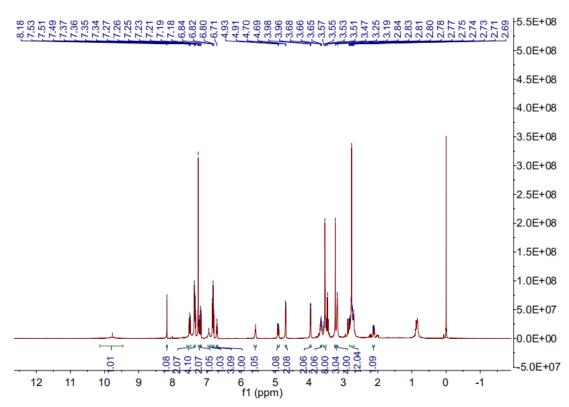


Figure S6. The ¹H-NMR spectrum of Compd. 17



S2. The ¹H-NMR and ¹³C-NMR spectra of final compounds.

Figure S7. The ¹H-NMR spectrum of Compd. 15

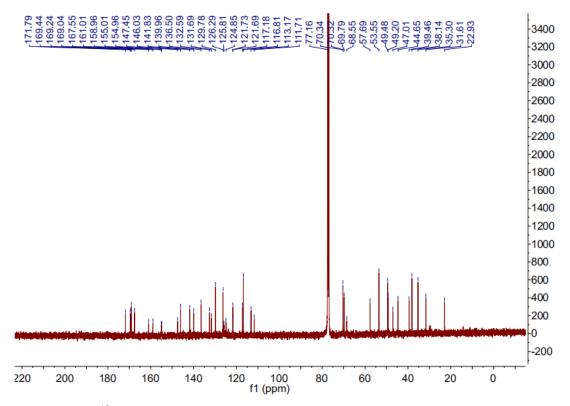


Figure S8. The ¹³C-NMR spectrum of Compd. 15

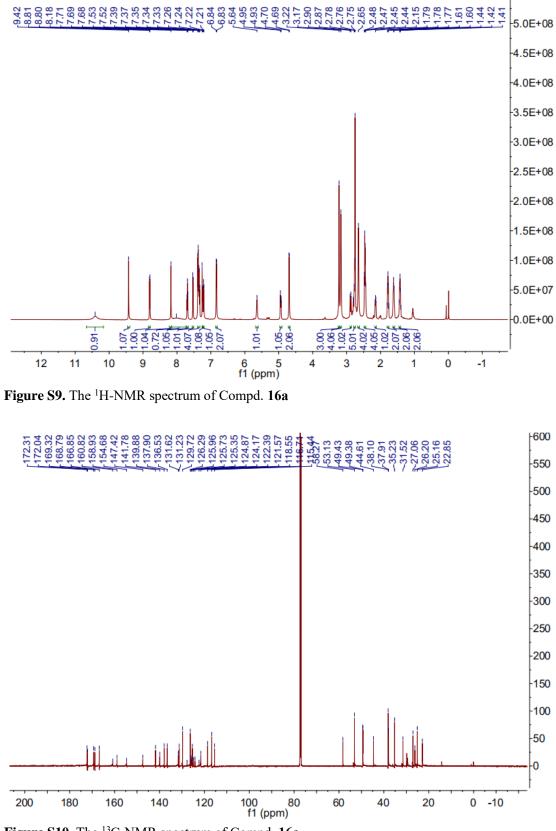


Figure S10. The ¹³C-NMR spectrum of Compd. 16a

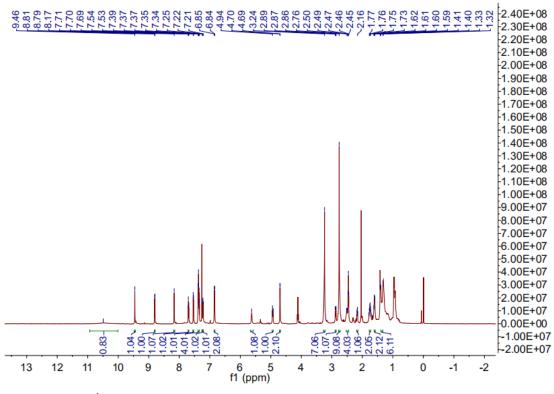


Figure S11. The ¹H-NMR spectrum of Compd. 16b

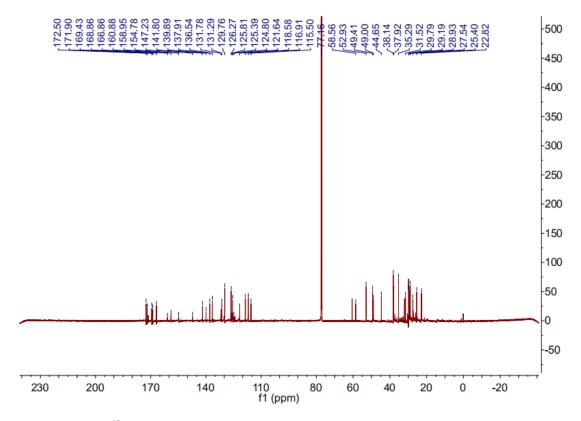


Figure S12. The ¹³C-NMR spectrum of Compd. 16b

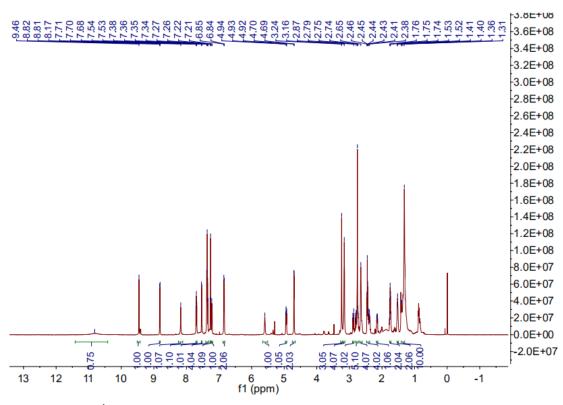


Figure S13. The ¹H-NMR spectrum of Compd. 16c

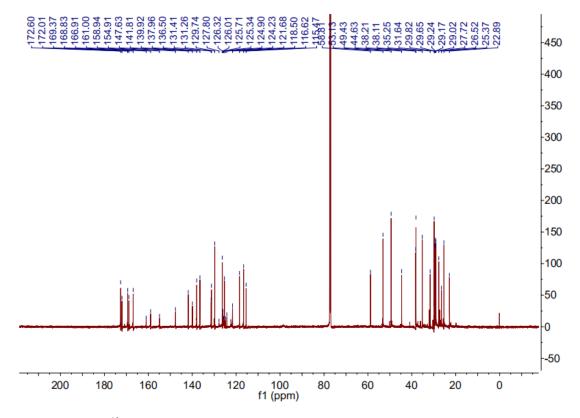


Figure S14. The ¹³C-NMR spectrum of Compd. 16c

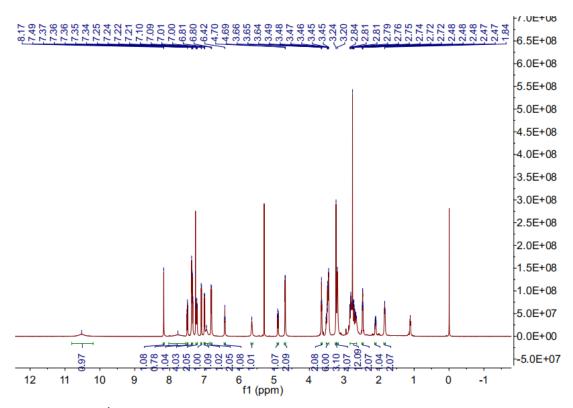


Figure S15. The ¹H-NMR spectrum of Compd. 19

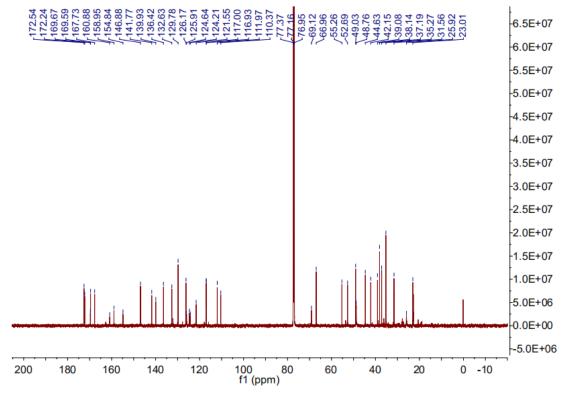


Figure S16. The ¹³C-NMR spectrum of Compd. 19

S3. The HRMS spectra of final compounds.

6.13e+005

----- m/z

Monoisotopic Mass, Even Electron lons 12313 formula(e) evaluated with 1 results within limits (up to 50 best isotopic matches for each mass) Elements Used: C: 45-45 H: 52-52 N: 0-100 O: 0-100 F: 3-3 Na: 0-3 S: 1-2 , 231225-7-156-1-S1----- 10 (0.061) 1: TOF MS ES+ 1002.3525 100-980.3687 1003.3549 % 979.3622 1004.3557 978.3536 1005.3559 1042.3698 1092.3207 1198,4875 828.3047 777.2972 847.6021 891.3187 927.3636 1167.2166 0-ا ا ا 800 1100 1200 850 900 950 1000 1050 1150

Figure S17. The HRMS spectrum of Compd. 15

Fragmentor Voltage 200		e Collision En	ergy Ior	Ionization Mode ESI			
5 5	+ESI Scan (ESI Scan (0.169 min) Frag=200.0V S-4.d Subtract					
2-							
75-							
.5-							
25-							
1-	927.3198						
75-	([C43 H47 F3 N10 O7 S]+Na)+						
).5-							
25 -		922.0098	943.2935	5 050 2462		985.7100	
0		922.0098		959.3462			

Peak List								
m/z	Z	Abund	Formula	Ion				
905.3388	1	186072.98	C43 H47 F3 N10 O7 S	(M+H)+				
906.341	1	92361.34	C43 H47 F3 N10 O7 S	(M+H)+				
907.3412	1	30667.26	C43 H47 F3 N10 O7 S	(M+H)+				
908.3419	1	7500.62	C43 H47 F3 N10 O7 S	(M+H)+				
927.3198	1	71513.15	C43 H47 F3 N10 O7 S	(M+Na)+				
928.322	1	33405.98	C43 H47 F3 N10 O7 S	(M+Na)+				
929.3233	1	12353.64	C43 H47 F3 N10 O7 S	(M+Na)+				
943.2935	1	12743.85						
985.71	1	21757.96						
986.7142	1	15182.7						

Figure S18. The HRMS spectrum of Compd. 16a

User Spectra

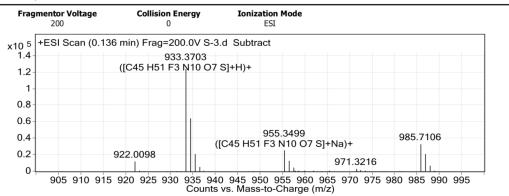


Figure S19. The HRMS spectrum of Compd. 16b

User Spectra

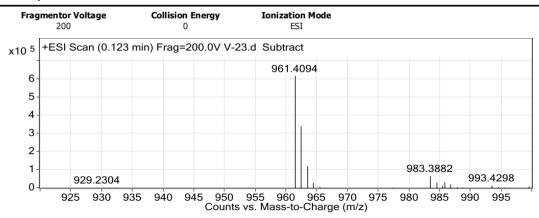


Figure S20. The HRMS spectrum of Compd. 16c

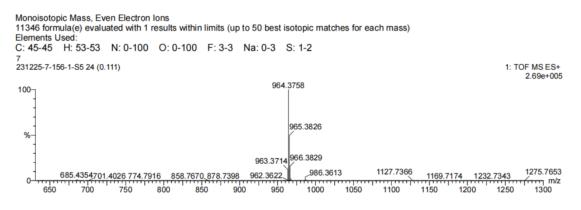


Figure S21. The HRMS spectrum of Compd. 19