

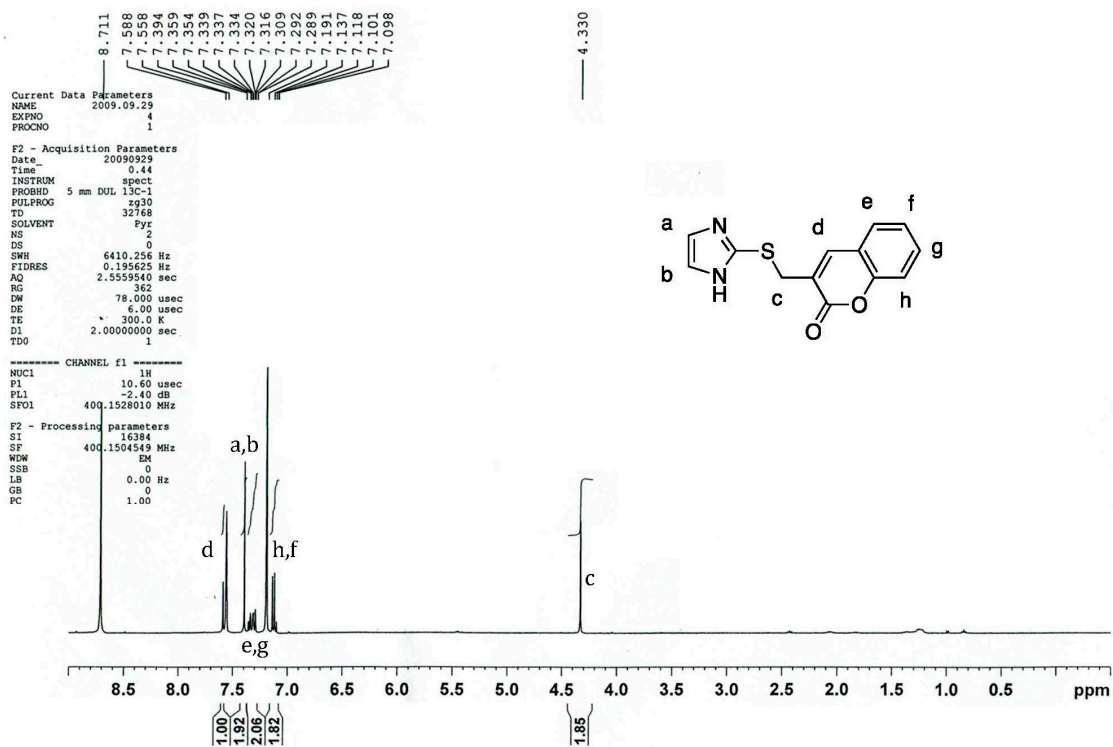
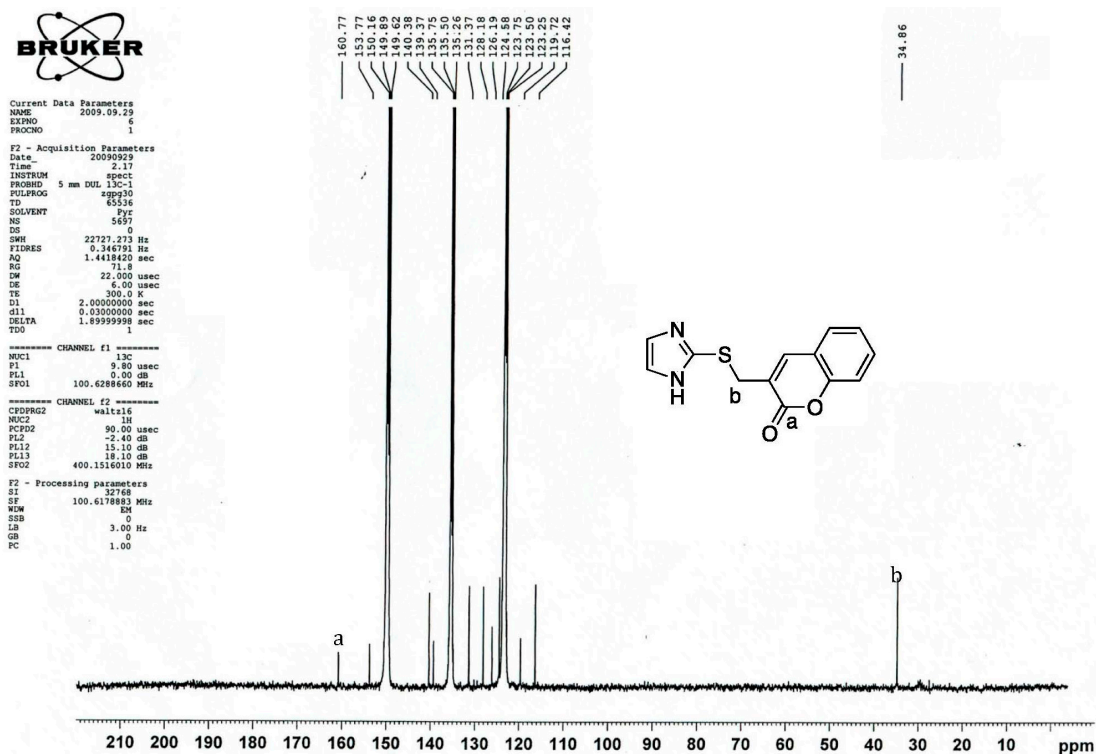
# Synthesis and Structure-Activity Relationship of Imidazole-Coumarin Conjugates against Hepatitis C Virus

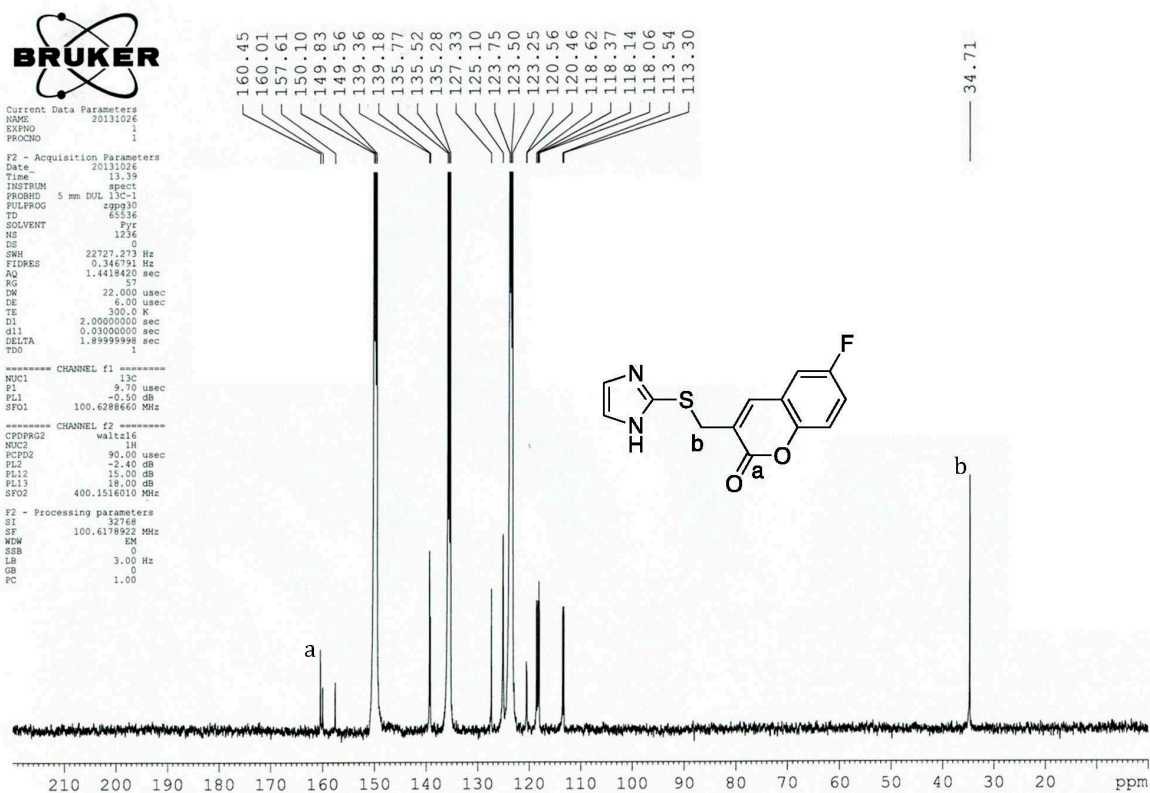
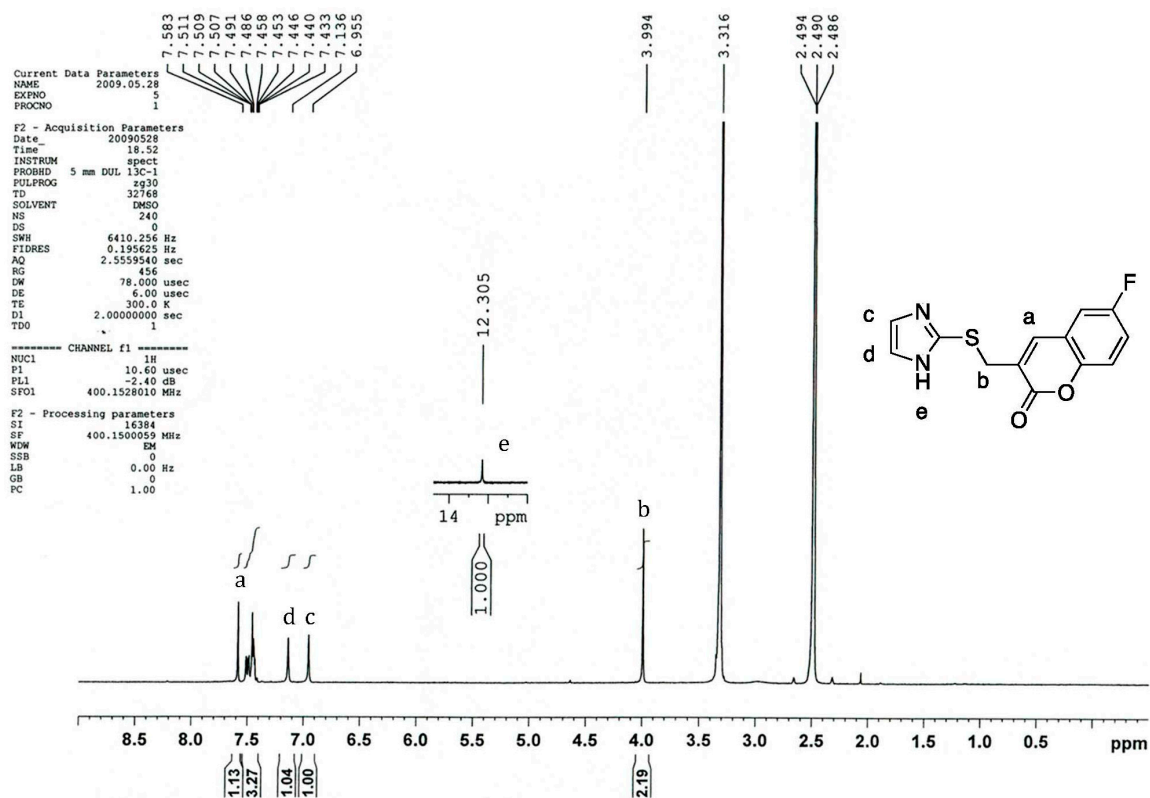
Shwu-Chen Tsay, Shu-Yu Lin, Wen-Chieh Huang, Ming-Hua Hsu, Kuo Chu Hwang, Chun-Cheng Lin, Jia-Cherng Horng, I-Chia Chen, Jih Ru Hwu, Fa-Kuen Shieh, Pieter Leyssen and Johan Neyts

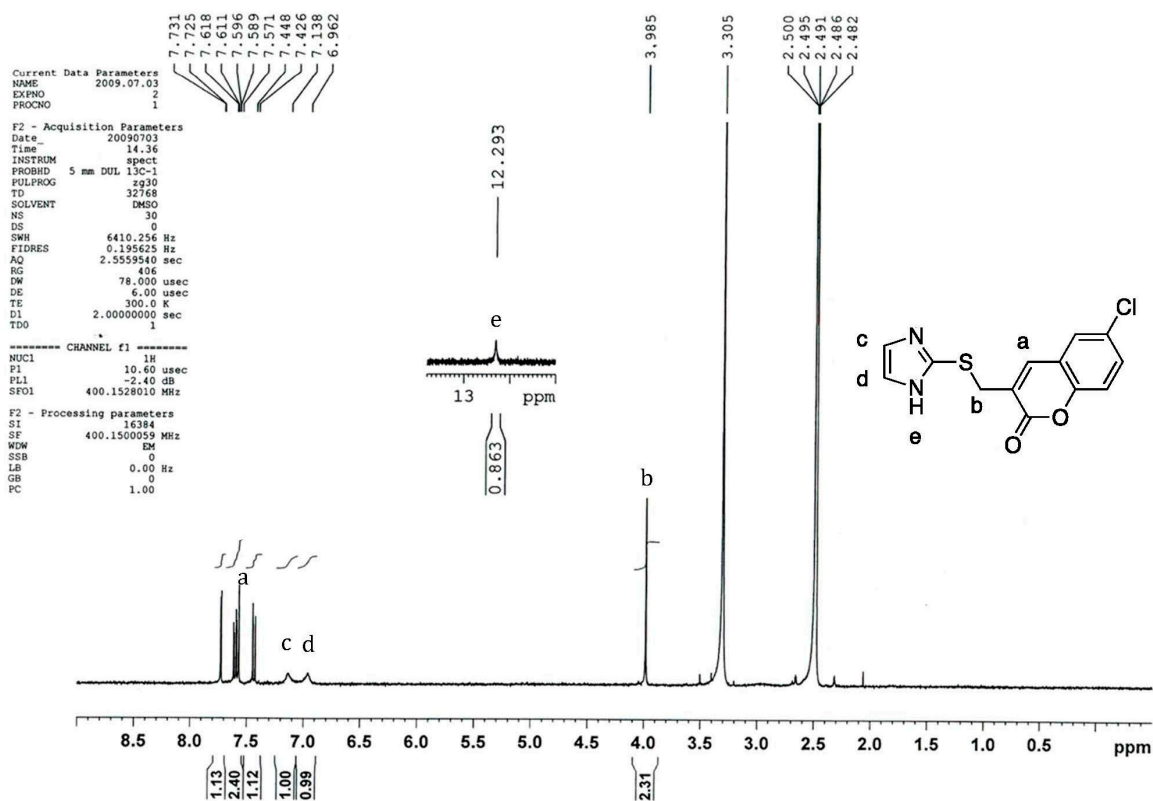
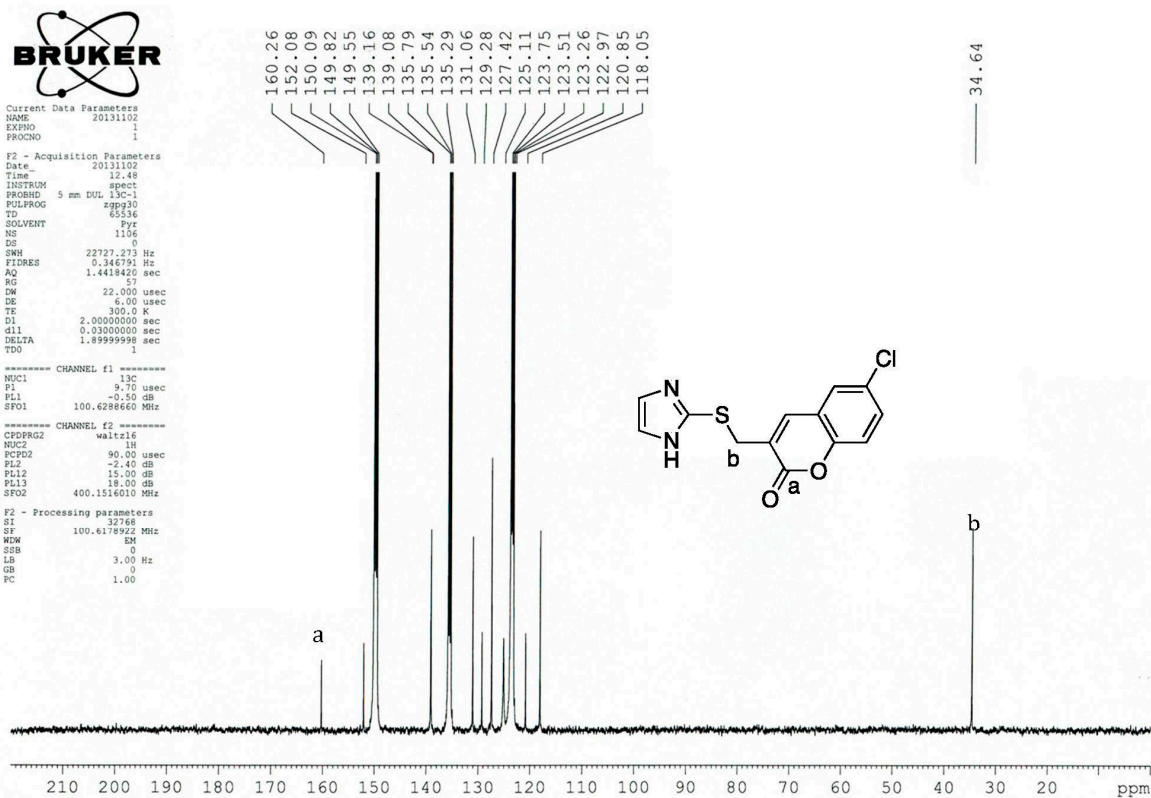
Table S1. Compound Purity by HPLC.

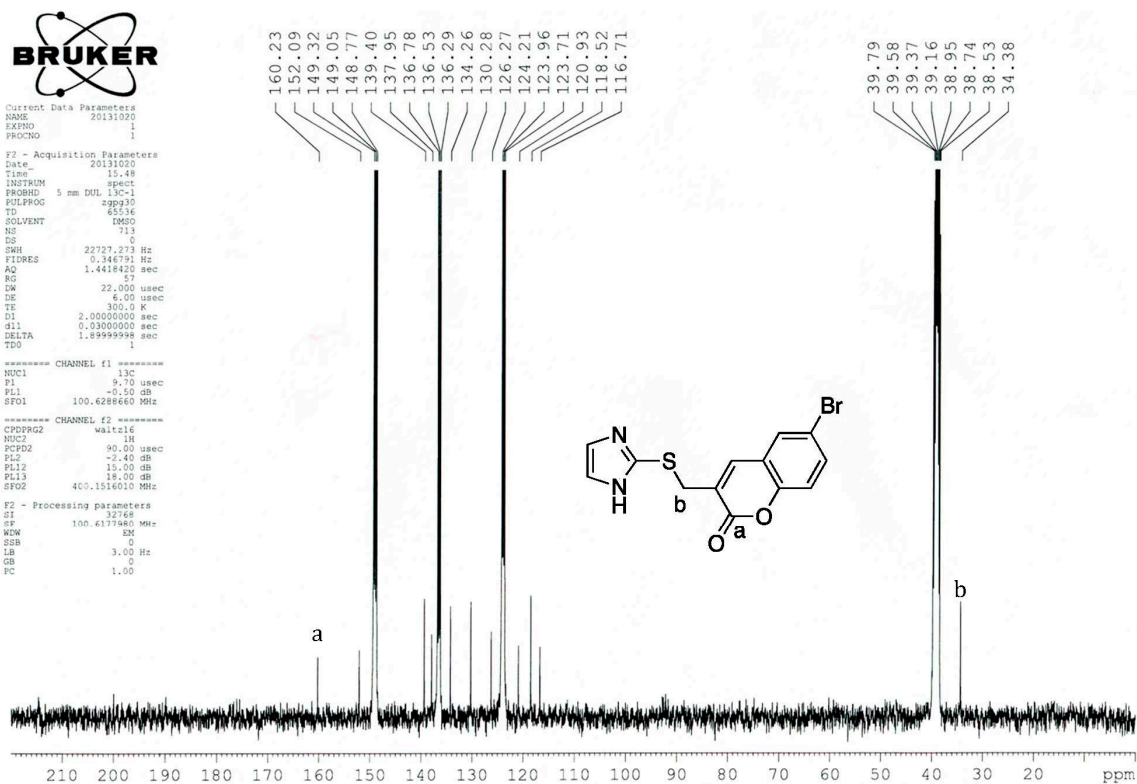
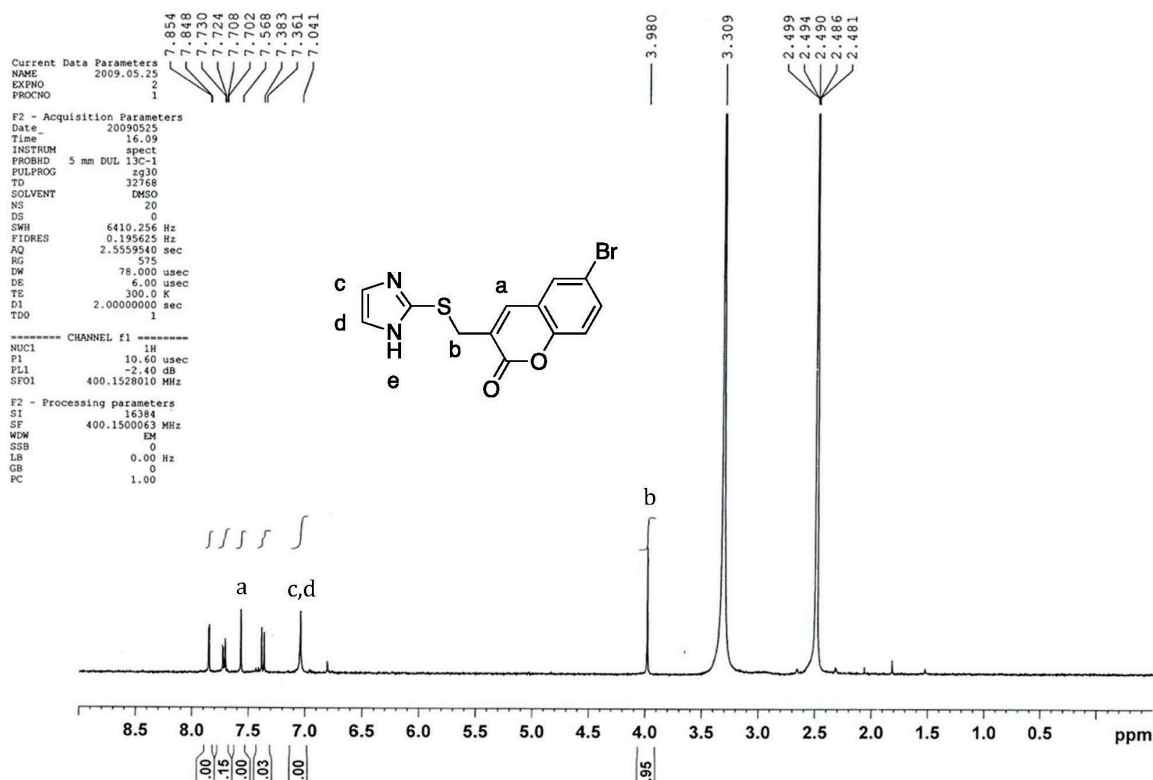
Compound	Gradient A/B	Purity (%)	$t_R$ (min)
3a	20:80	98.5	7.52
3b	20:80	99.0	8.02
3c	20:80	98.6	9.58
3d	20:80	98.8	8.55
3e	20:80	99.6	7.83
3f	20:80	99.4	8.61
3g	20:80	99.8	10.44
7a	20:80	98.0	6.37
7b	20:80	98.1	7.16
7c	20:80	99.0	8.19
7d	20:80	98.9	8.47
7e	20:80	99.3	6.85
9a	20:80	98.2	6.68
9b	20:80	98.7	6.87
9d	20:80	99.2	7.12
9e	20:80	98.6	7.45
9f	20:80	98.8	7.36
11b	20:80	98.3	7.59
11e	20:80	98.4	7.41
11f	20:80	99.3	7.37

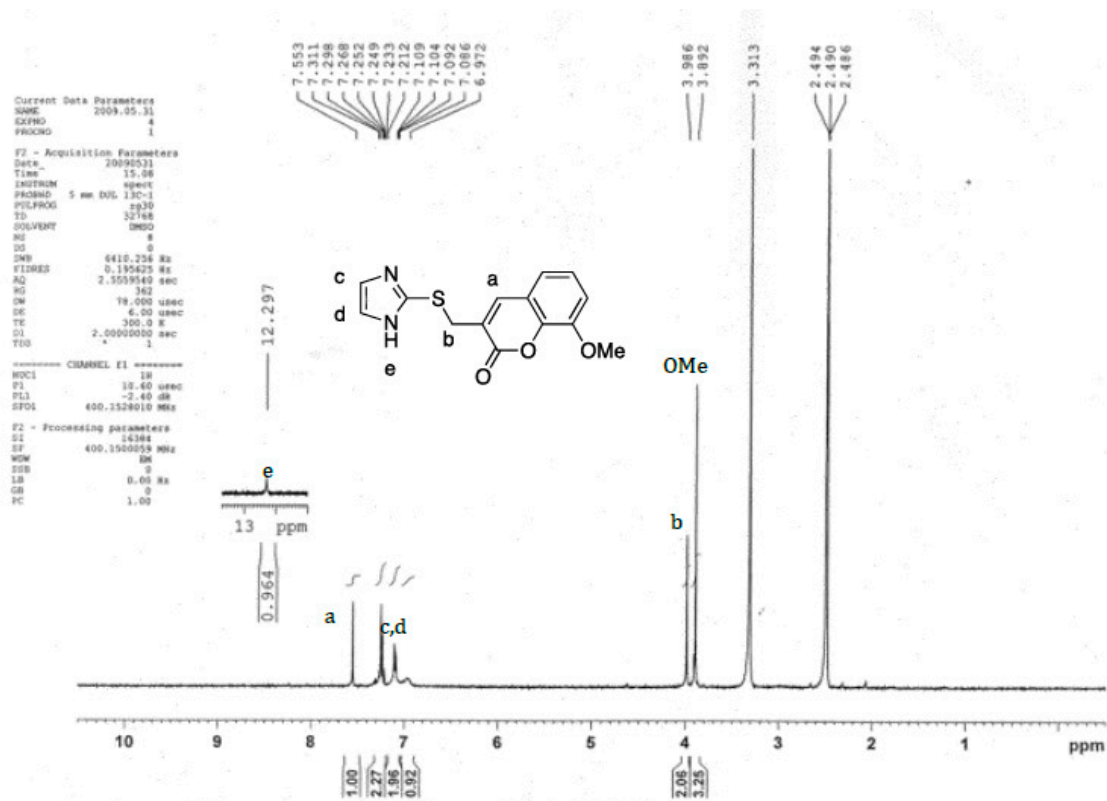
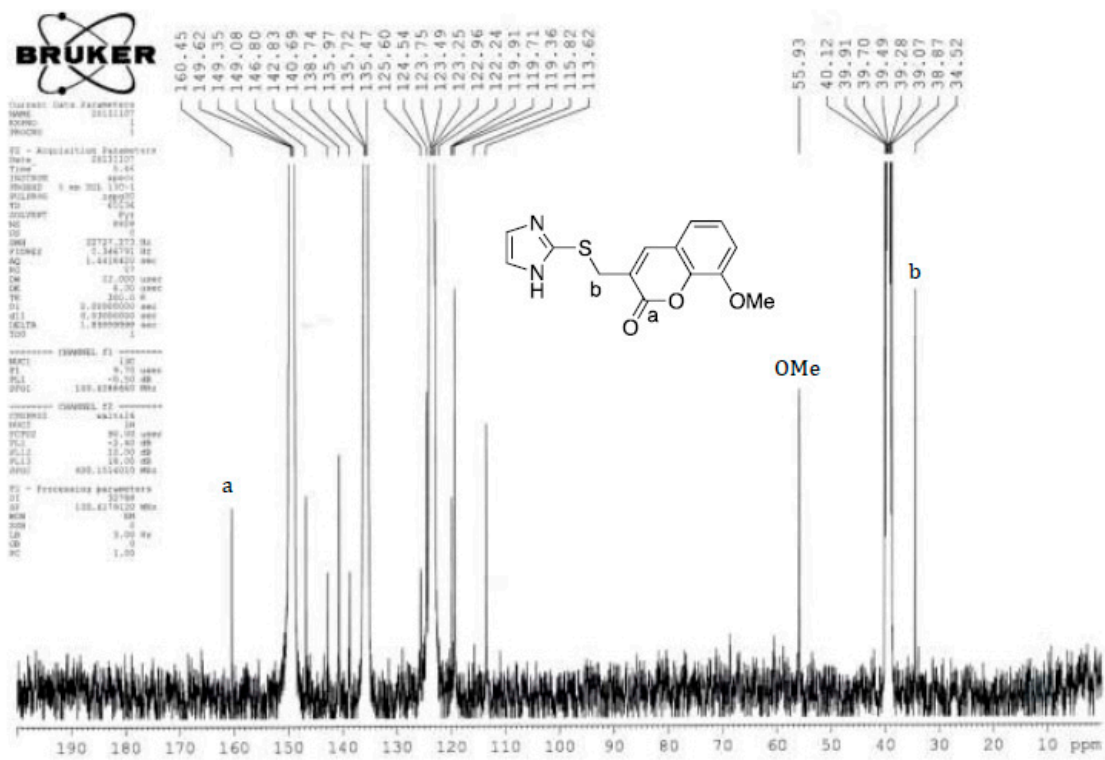
Mobile phase: solvent A, acetonitrile; solvent B, H<sub>2</sub>O; Detection Time: totally 20 min; Detection: 1254 nm; Column: Thermo 5 mm Hypersil ODS (250 × 4.6 mm D.I.); Flow rate: 0.80 mL/min.

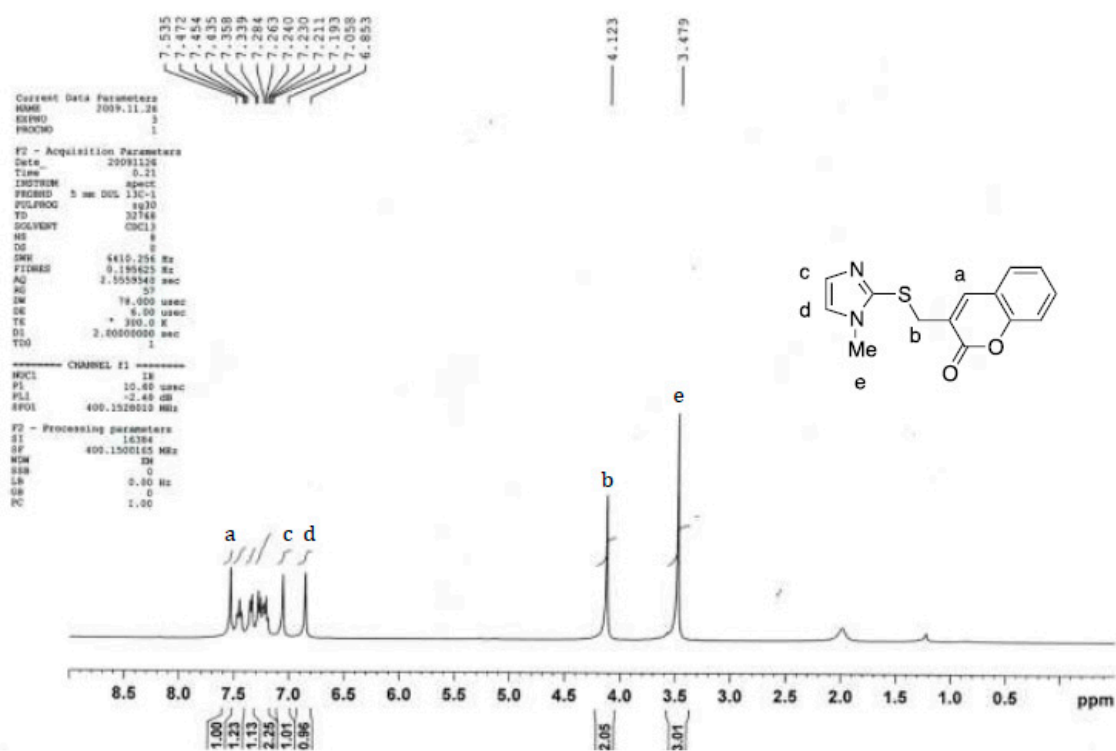
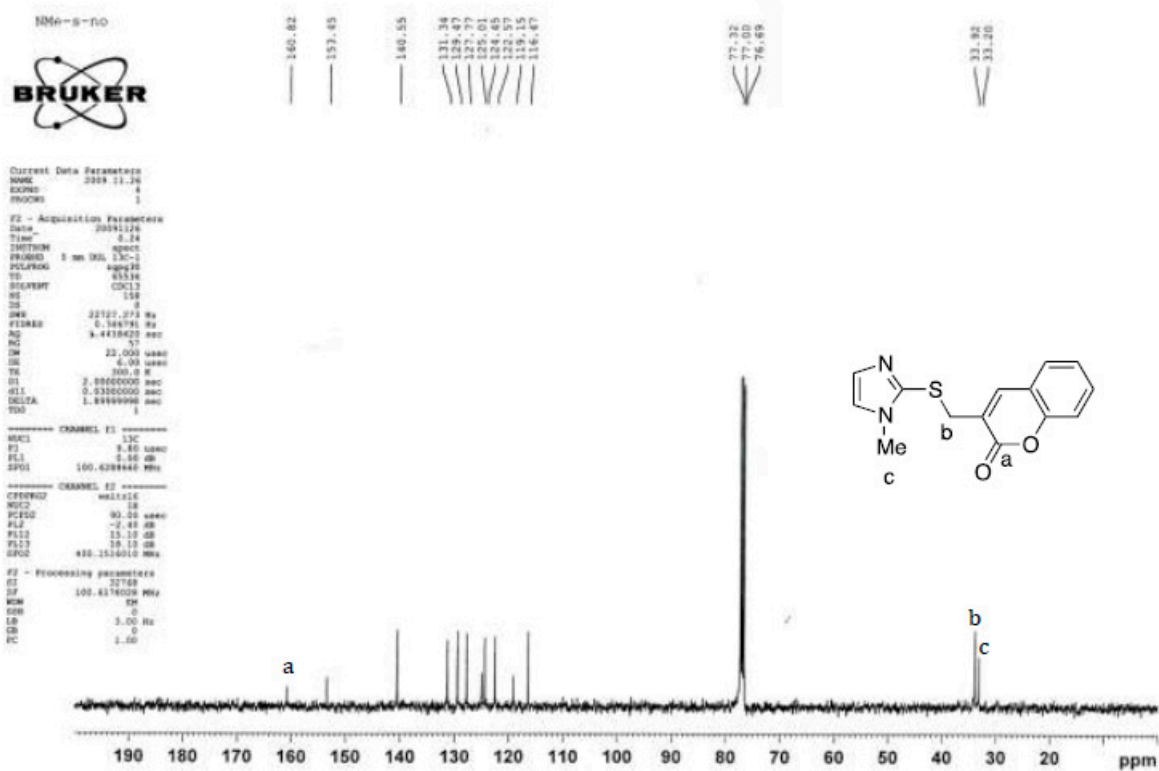
Figure S1. <sup>1</sup>H NMR spectrum of compound 3a.Figure S2. <sup>13</sup>C NMR spectrum of compound 3a.

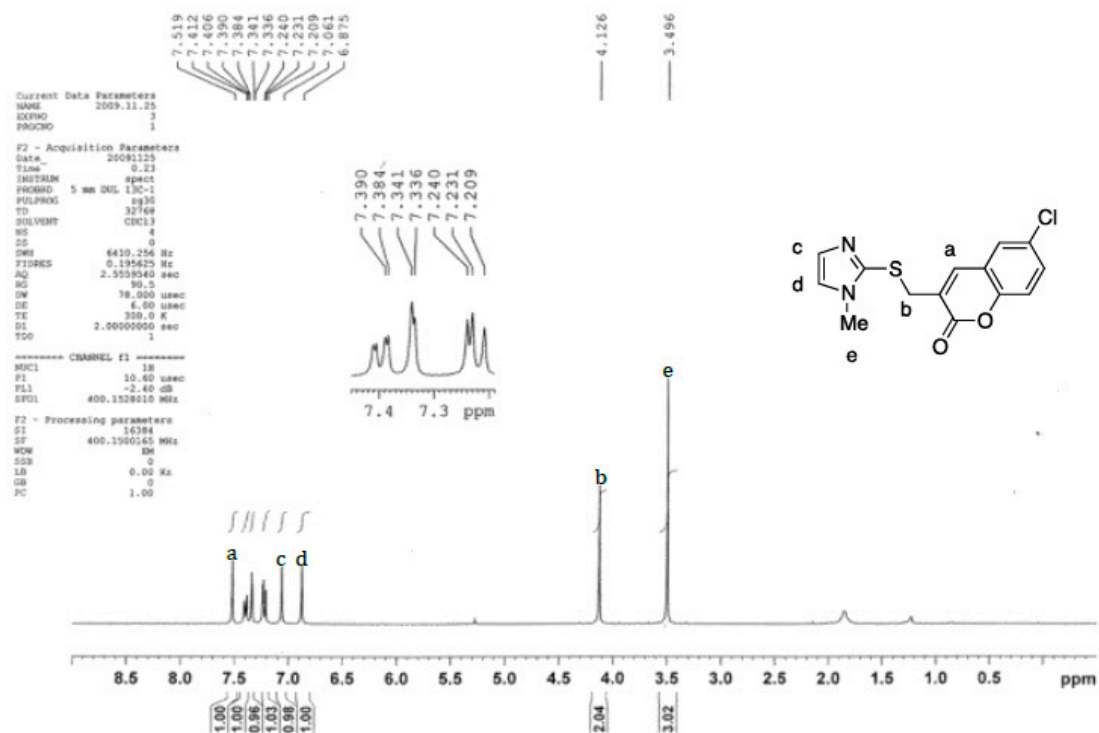
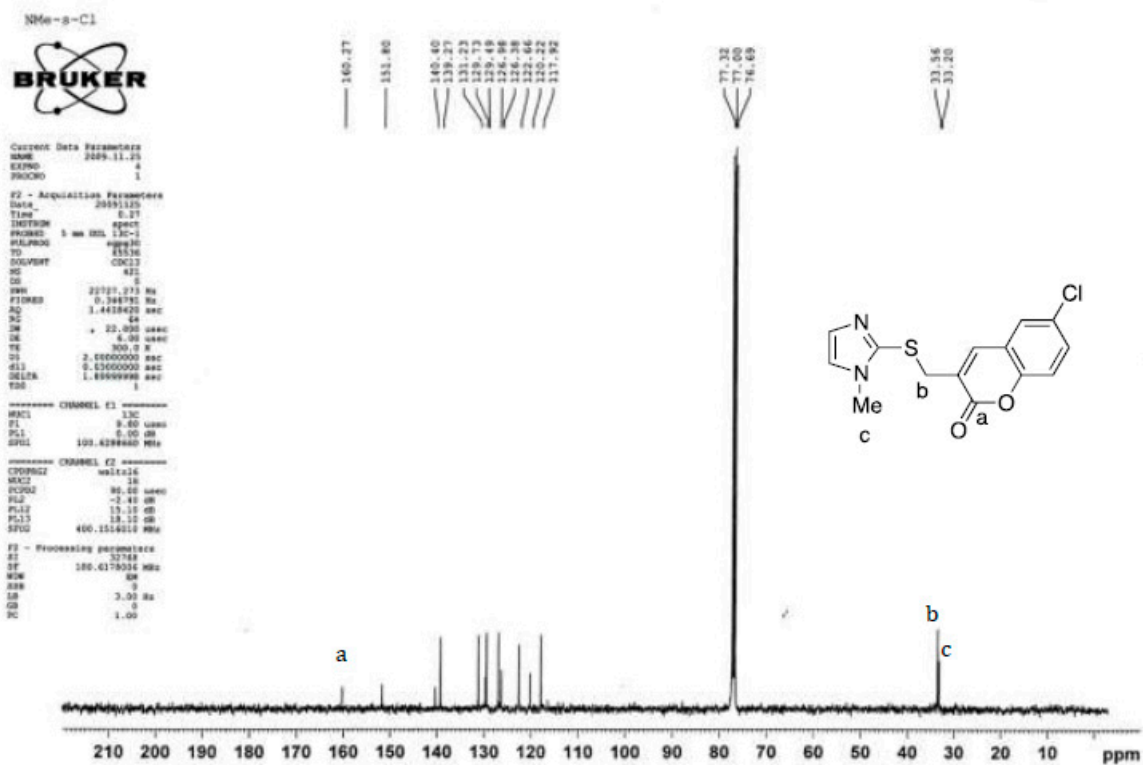


Figure S5. <sup>1</sup>H NMR spectrum of compound 3c.Figure S6. <sup>13</sup>C NMR spectrum of compound 3c.

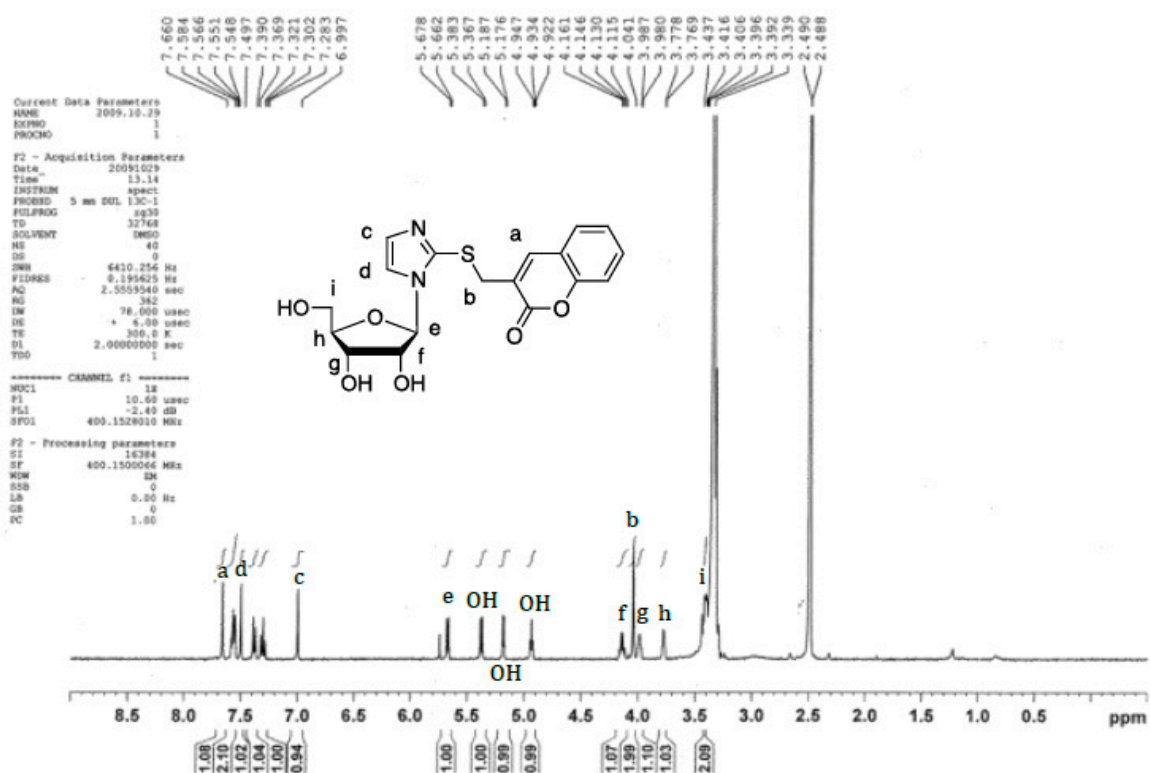
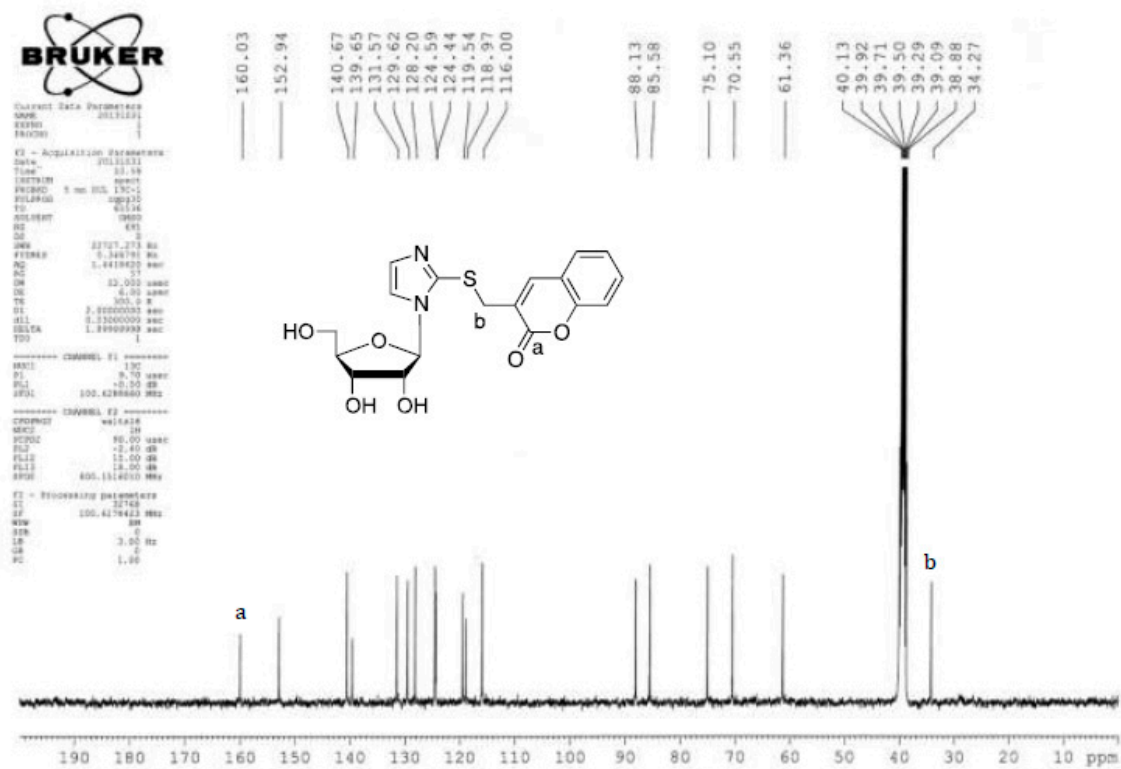


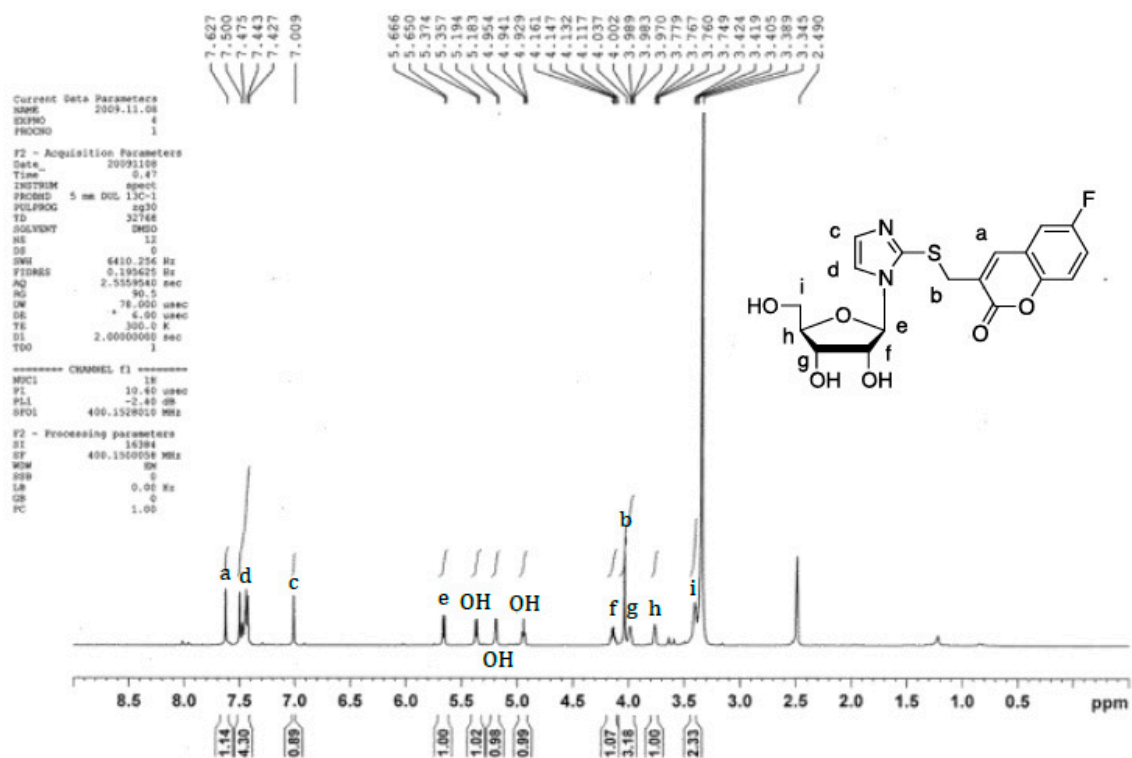
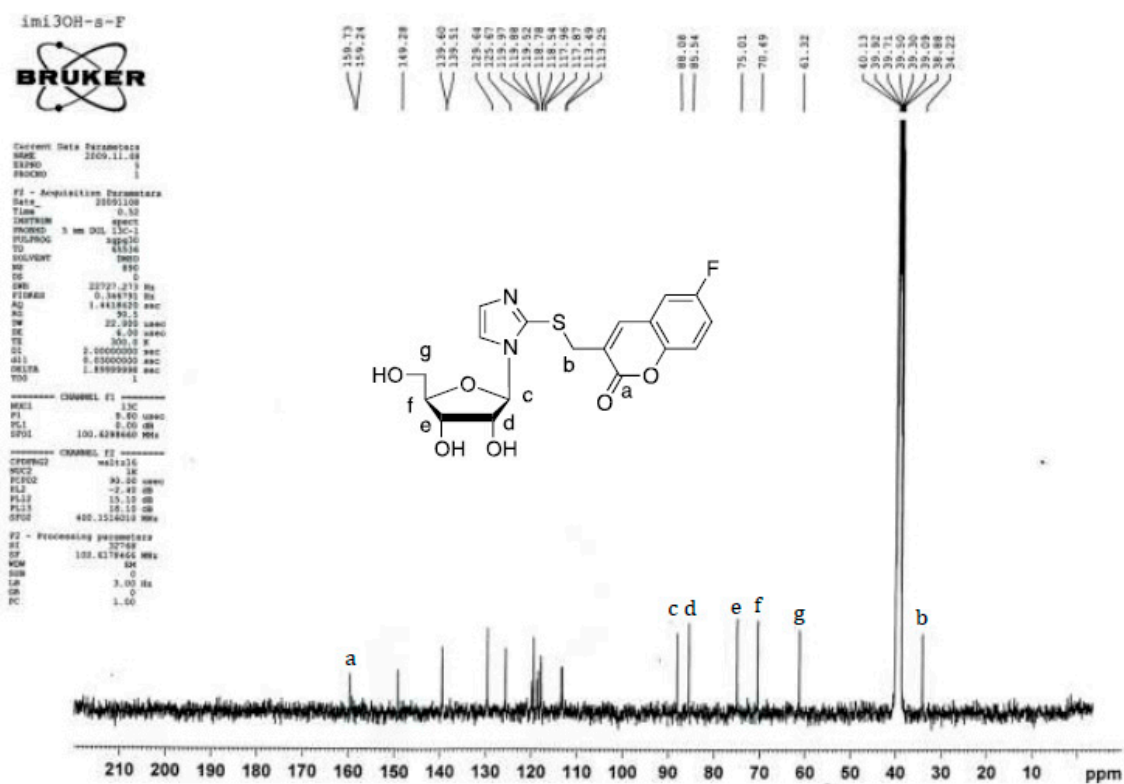
Figure S9. <sup>1</sup>H NMR spectrum of compound 3e.Figure S10. <sup>13</sup>C NMR spectrum of compound 3e.

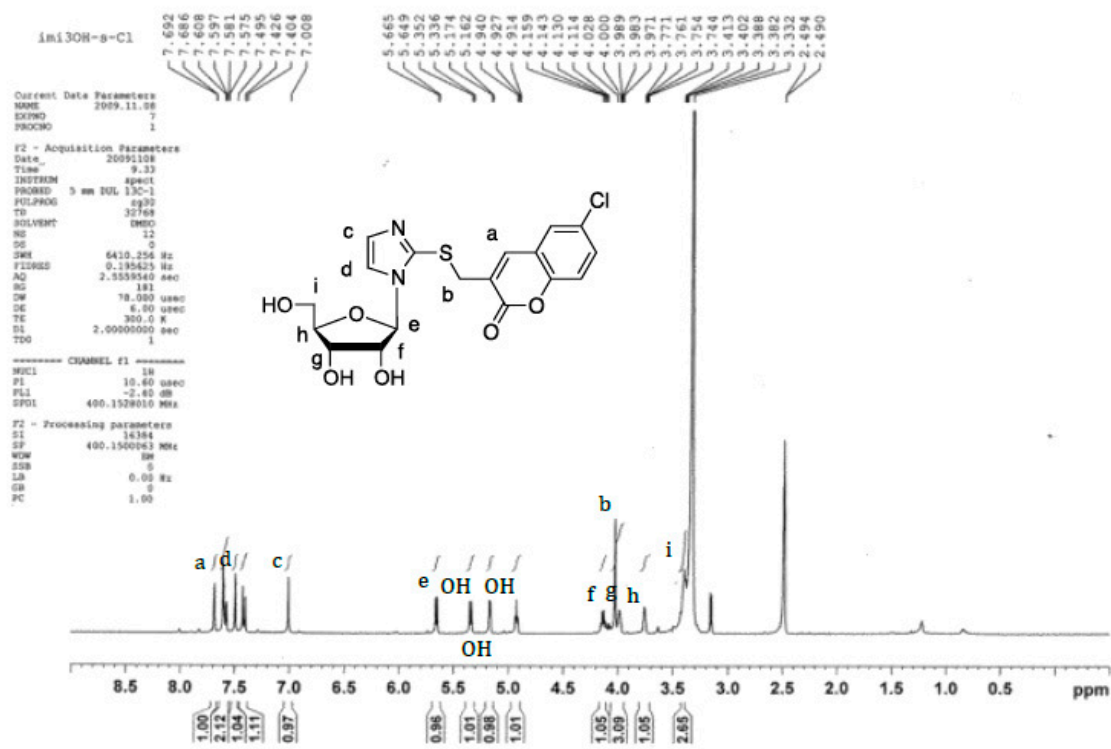
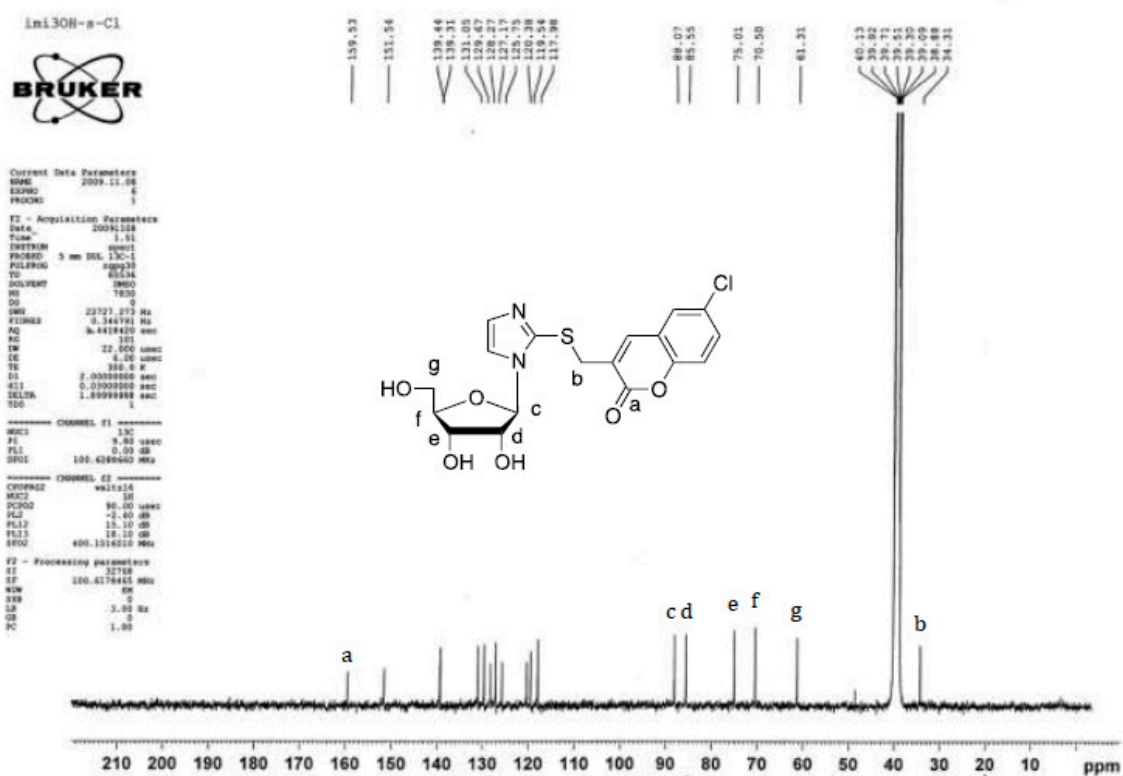
Figure S11. <sup>1</sup>H NMR spectrum of compound 3f.Figure S12. <sup>13</sup>C NMR spectrum of compound 3f.

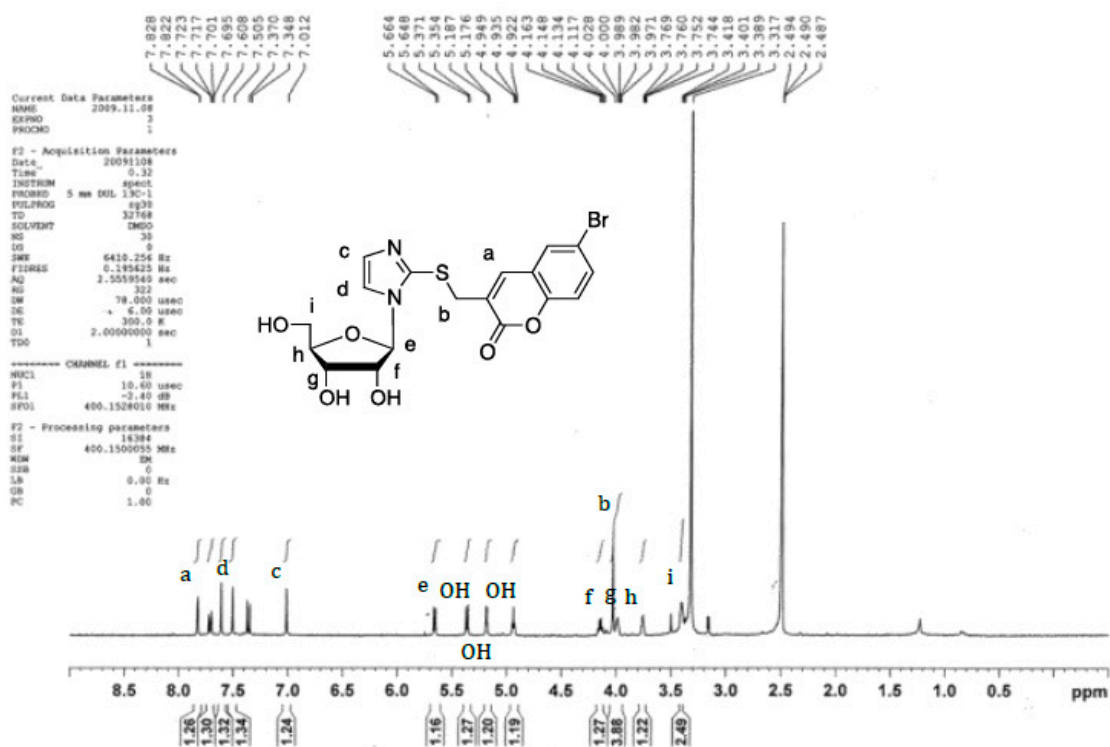
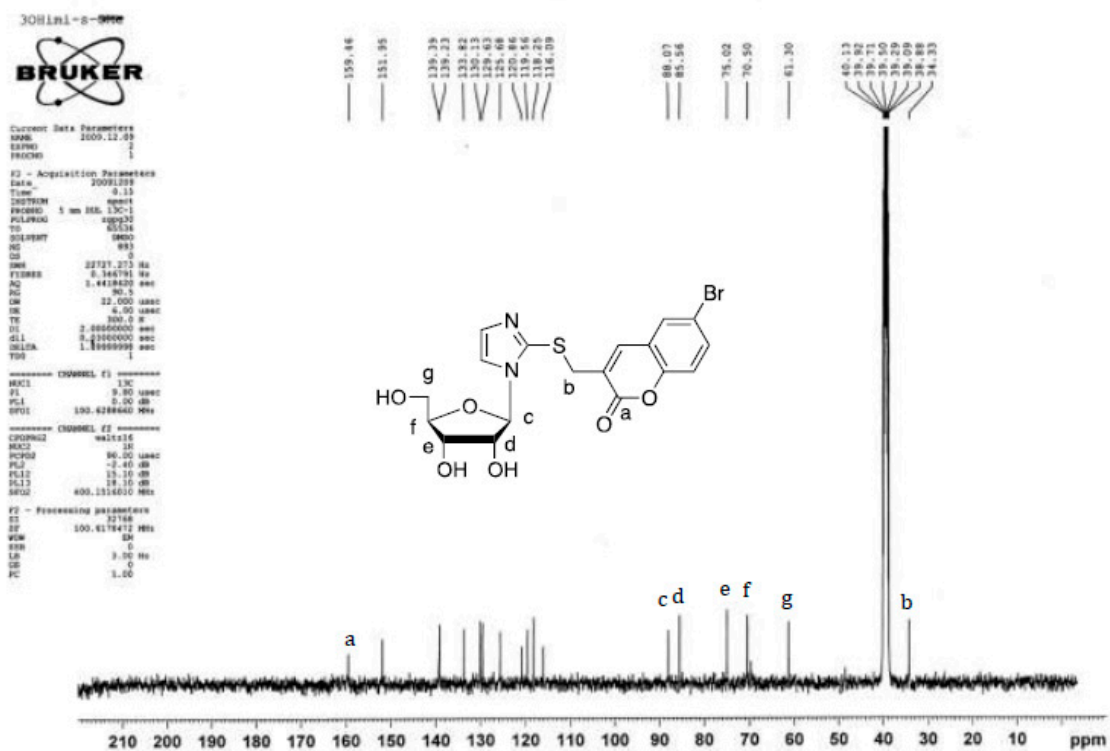
Figure S13.  $^1\text{H}$  NMR spectrum of compound 3g.Figure S14.  $^{13}\text{C}$  NMR spectrum of compound 3g.



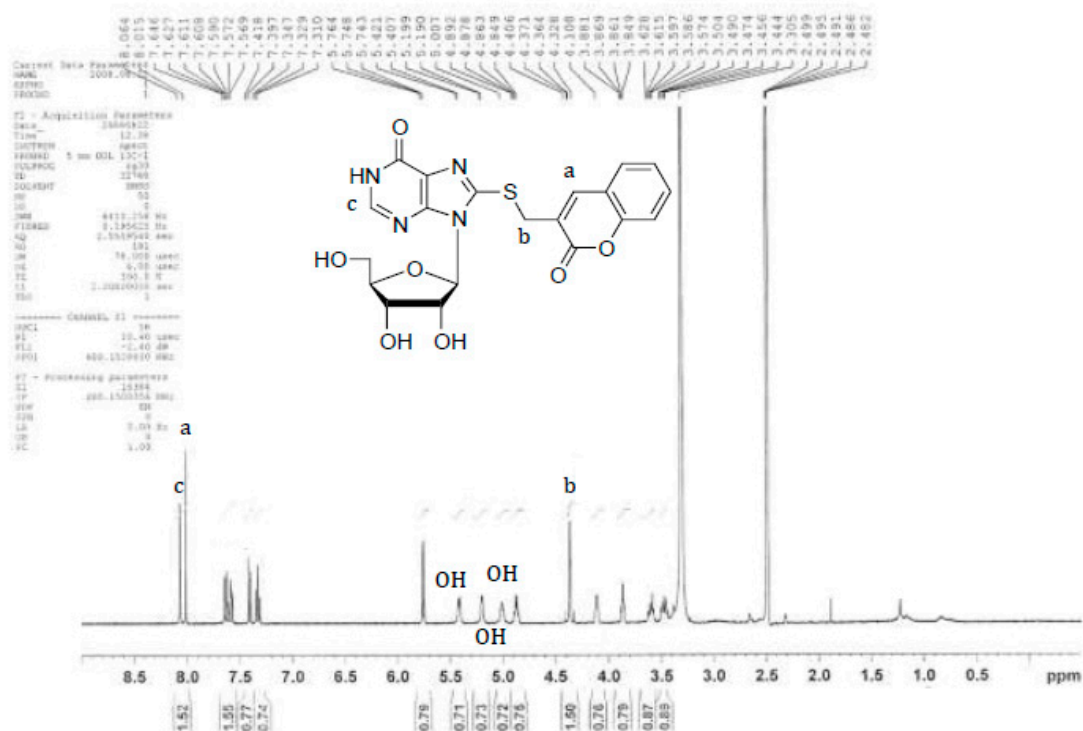
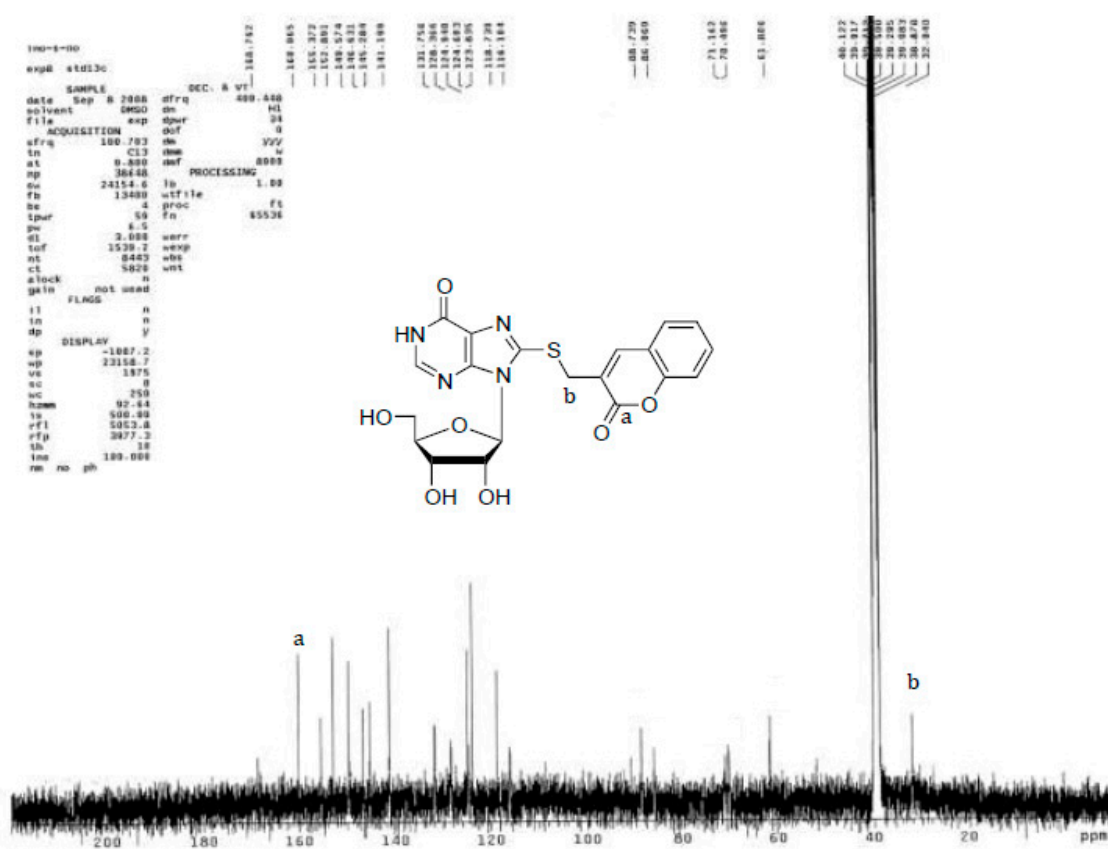
Figure S15.  $^1\text{H}$  NMR spectrum of compound 7a.Figure S16.  $^{13}\text{C}$  NMR spectrum of compound 7a.

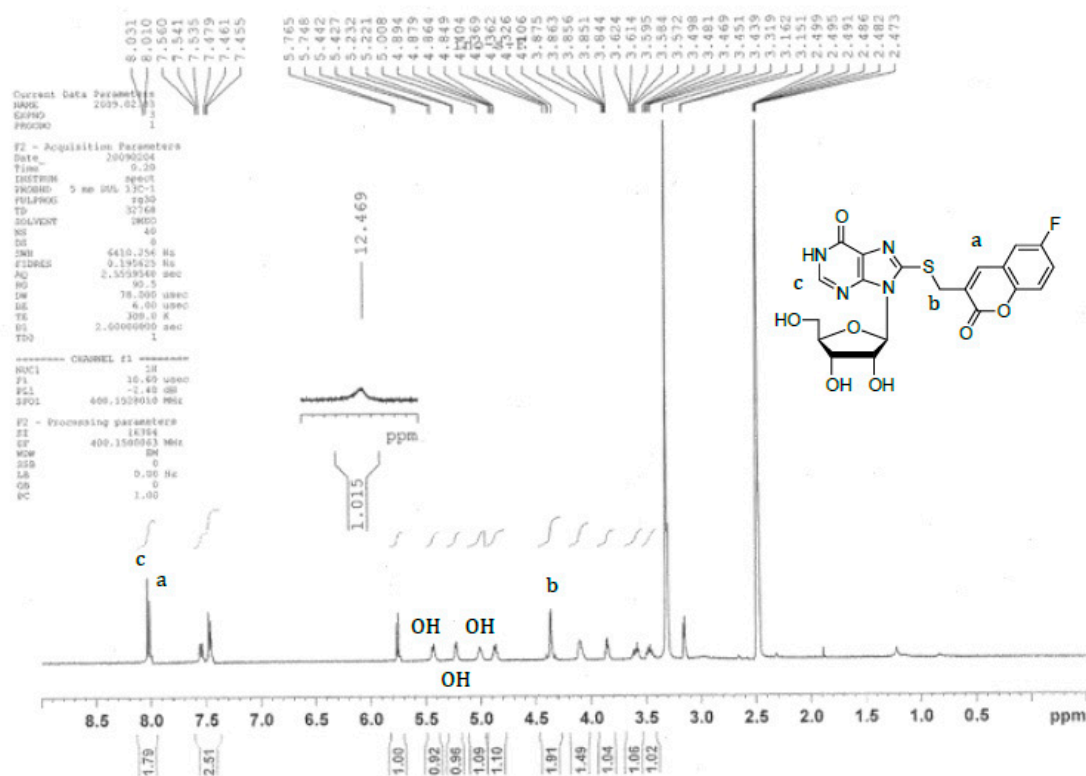
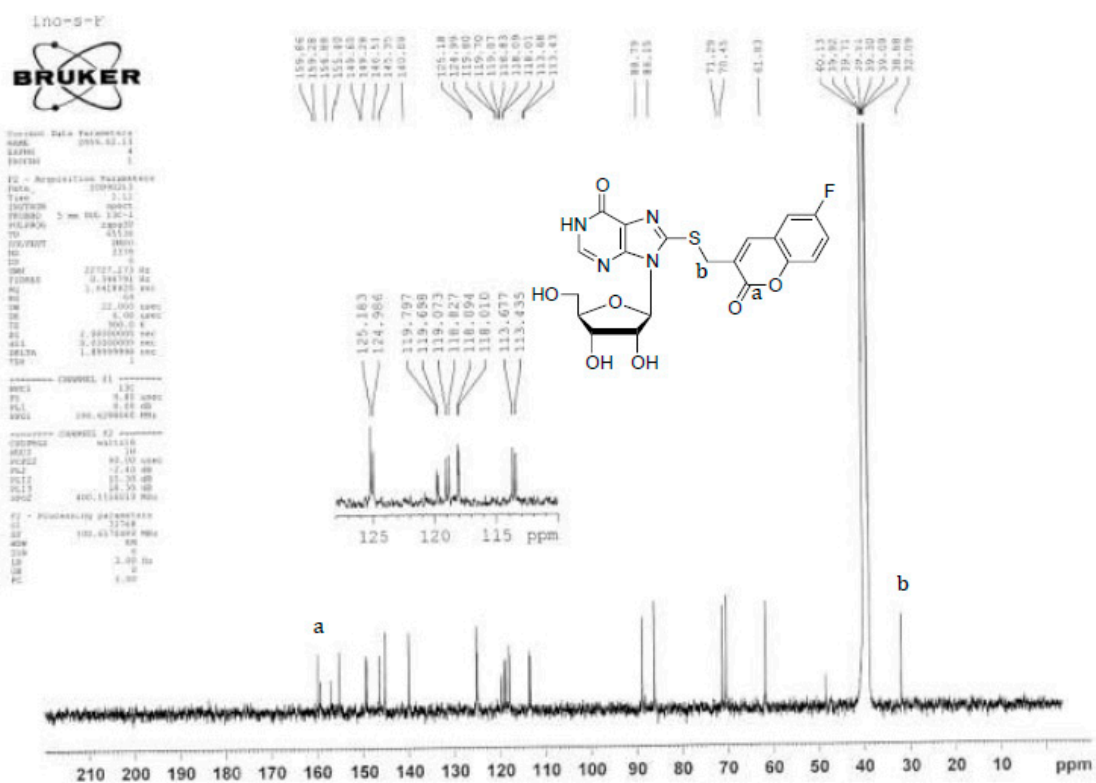
Figure S17.  $^1\text{H}$  NMR spectrum of compound 7b.Figure S18.  $^{13}\text{C}$  NMR spectrum of compound 7b.

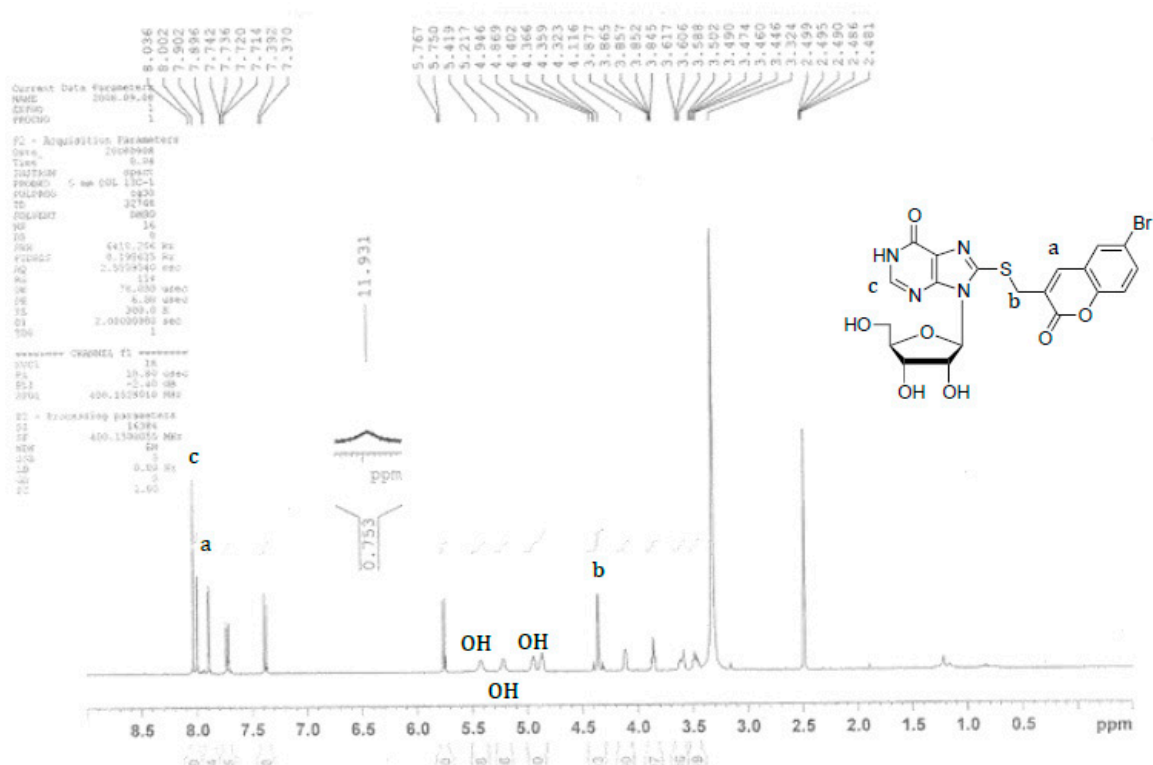
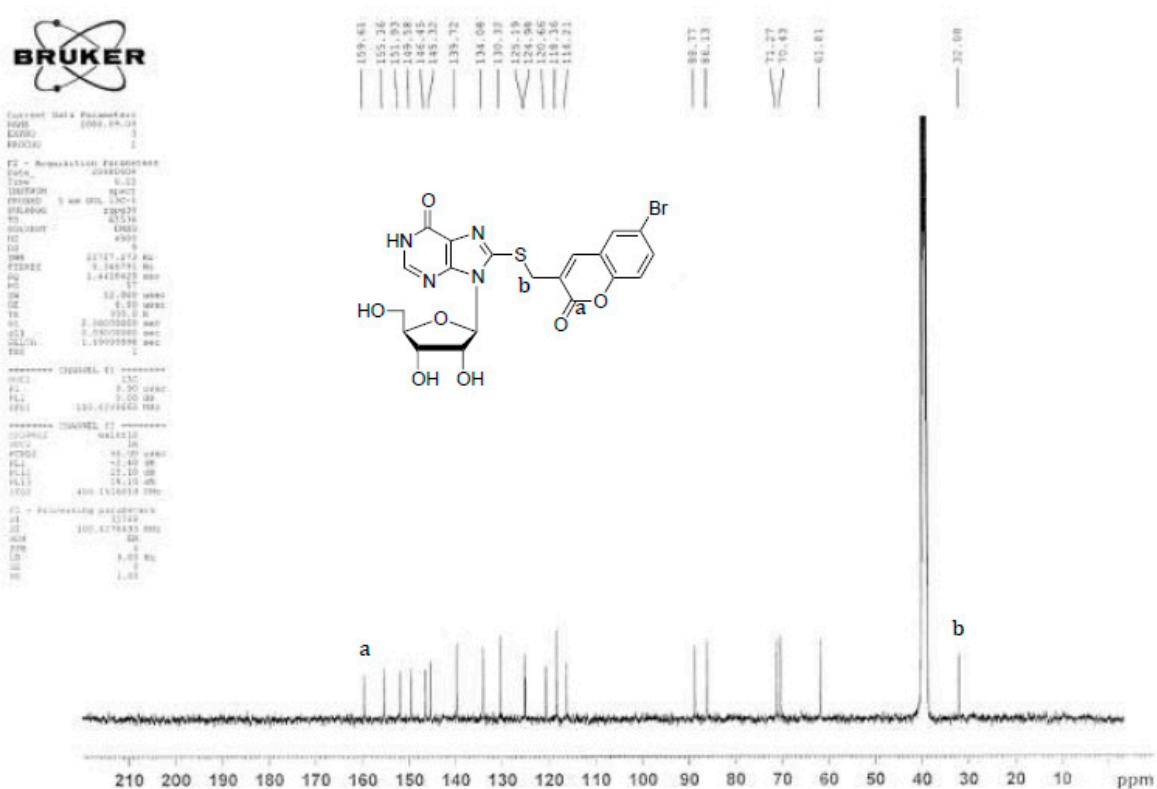
Figure S19. <sup>1</sup>H NMR spectrum of compound 7c.Figure S20. <sup>13</sup>C NMR spectrum of compound 7c.

Figure S21. <sup>1</sup>H NMR spectrum of compound 7d.Figure S22. <sup>13</sup>C NMR spectrum of compound 7d.



Figure S25. <sup>1</sup>H NMR spectrum of compound 9a.Figure S26. <sup>13</sup>C NMR spectrum of compound 9a.

Figure S27. <sup>1</sup>H NMR spectrum of compound 9b.Figure S28. <sup>13</sup>C NMR spectrum of compound 9b.

Figure S29. <sup>1</sup>H NMR spectrum of compound 9d.Figure S30. <sup>13</sup>C NMR spectrum of compound 9d.



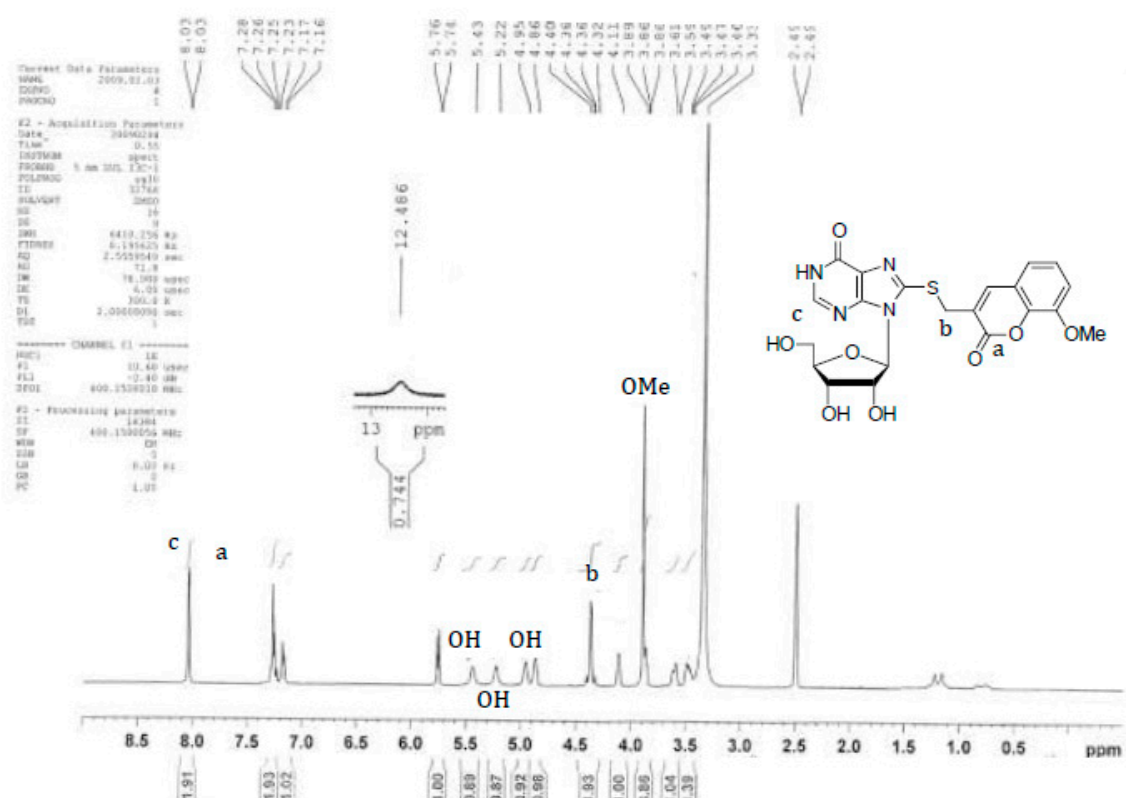


Figure S31. <sup>1</sup>H NMR spectrum of compound 9e.

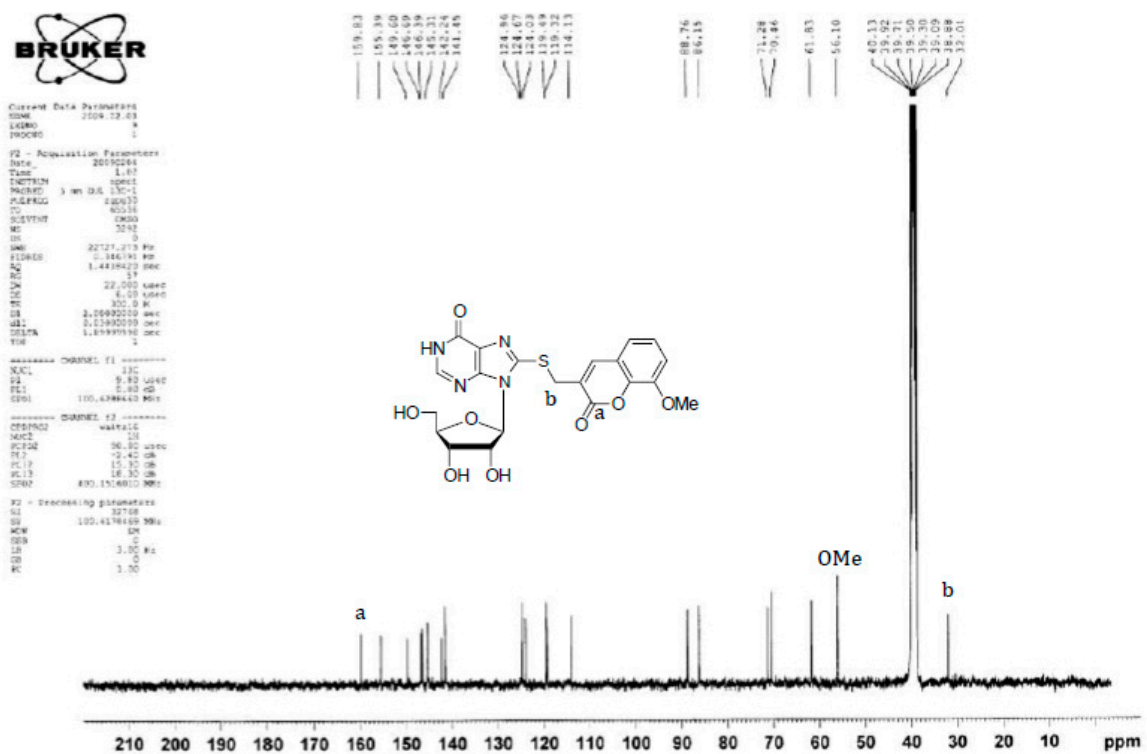


Figure S32. <sup>13</sup>C NMR spectrum of compound 9e.

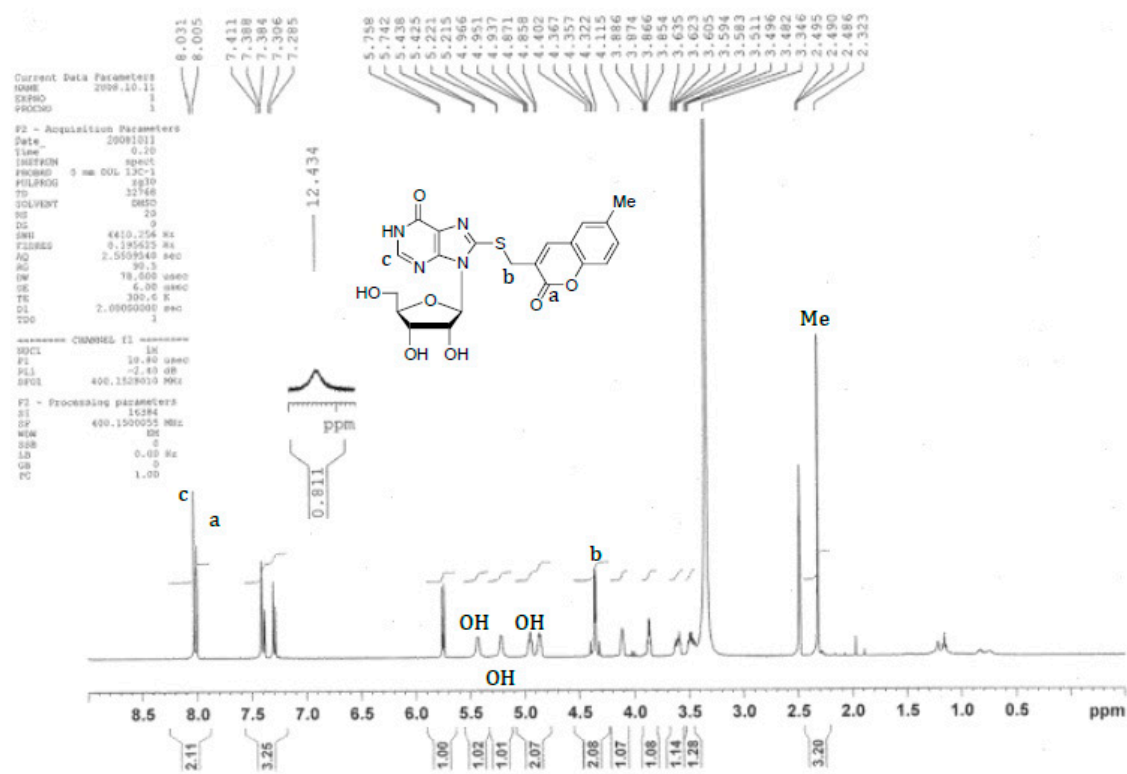


Figure S33. <sup>1</sup>H NMR spectrum of compound 9f.

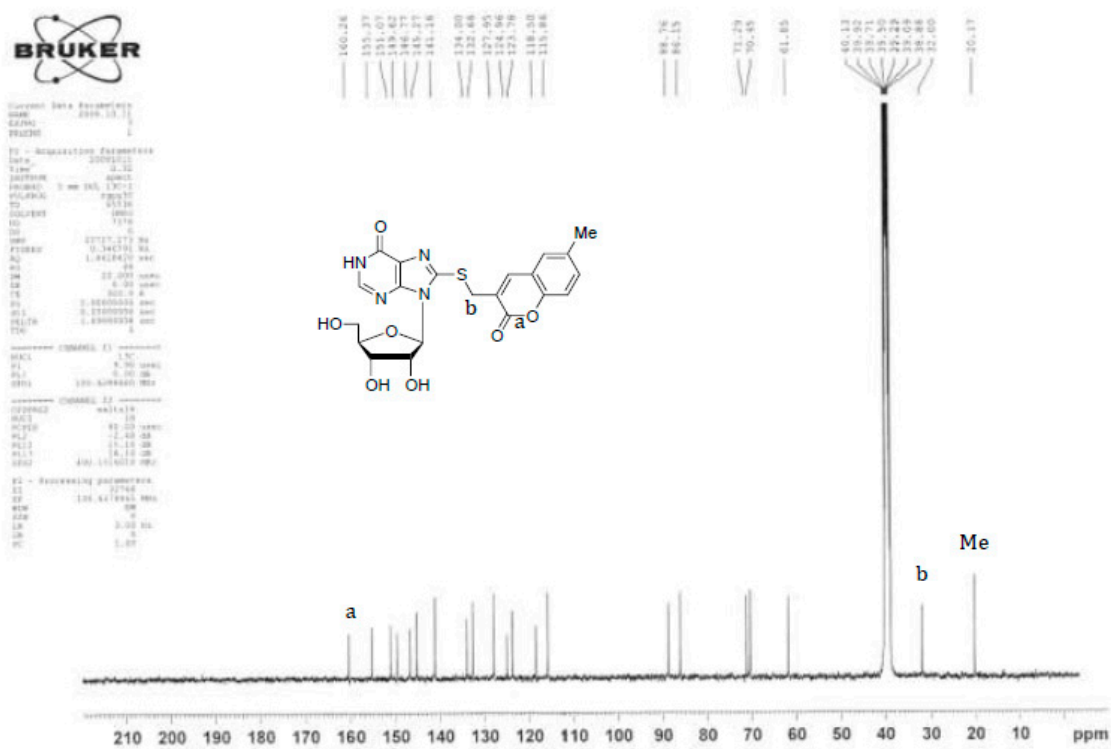
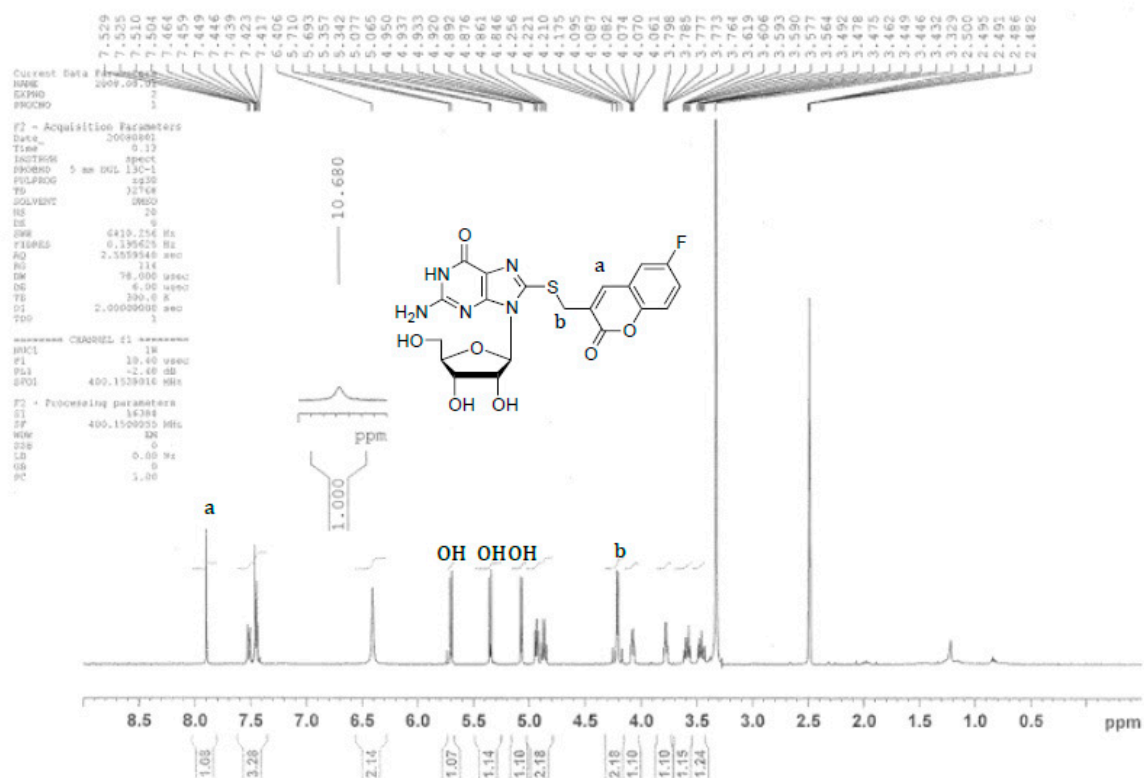
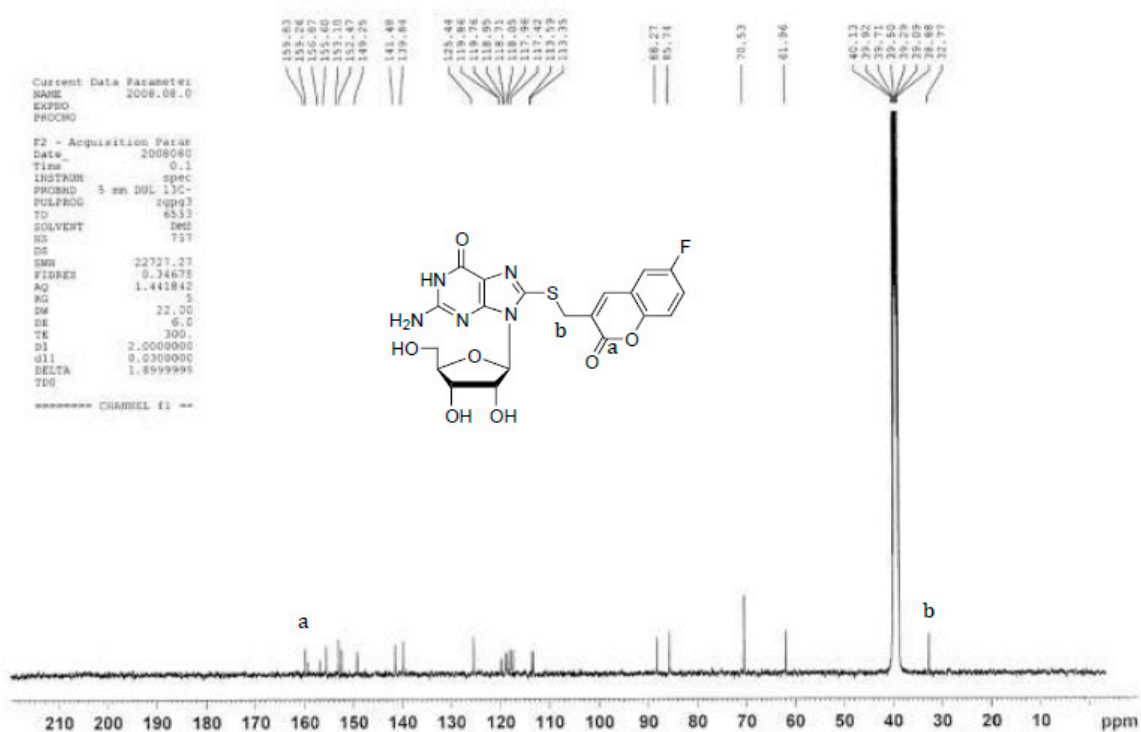
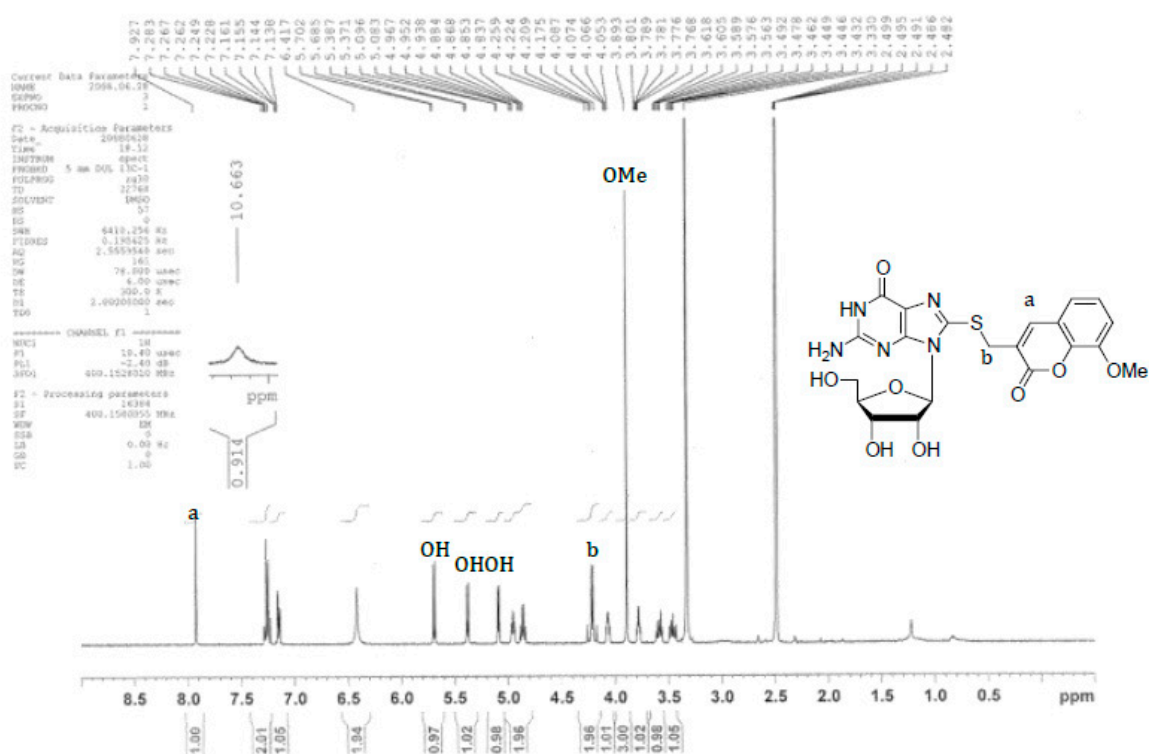
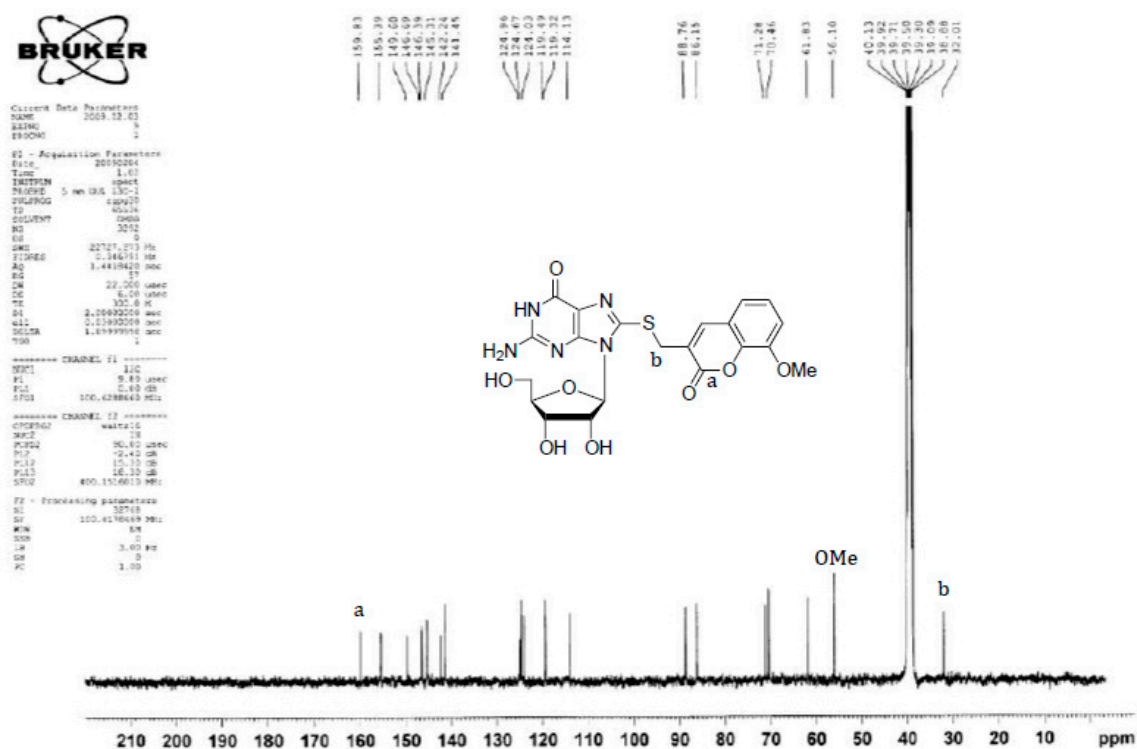
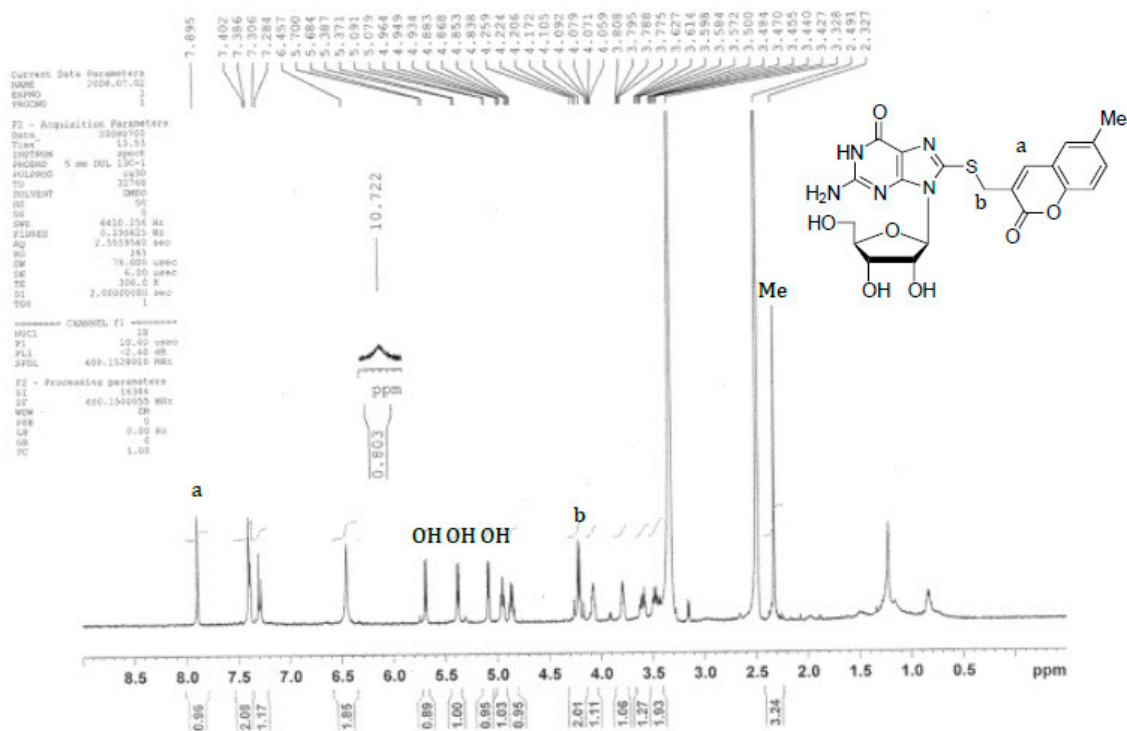
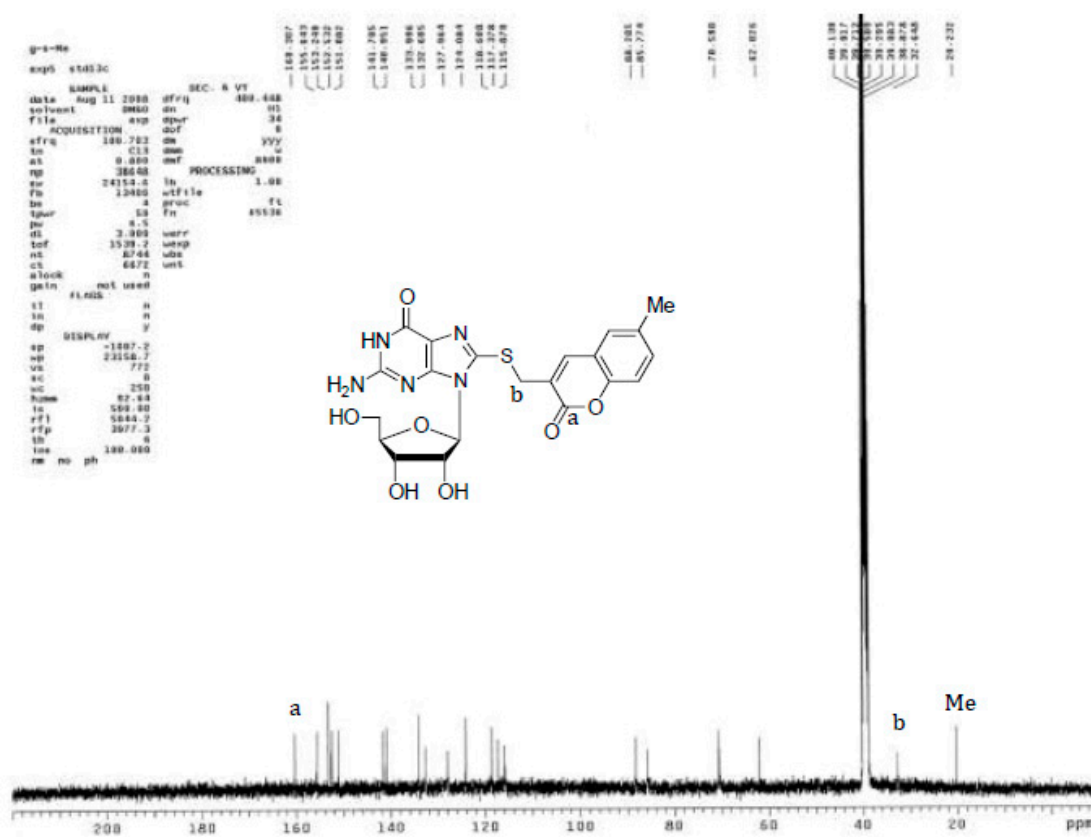


Figure S34. <sup>13</sup>C NMR spectrum of compound 9f.

Figure S35. <sup>1</sup>H NMR spectrum of compound 11b.Figure S36. <sup>13</sup>C NMR spectrum of compound 11b.

Figure S37. <sup>1</sup>H NMR spectrum of compound 11e.Figure S38. <sup>13</sup>C NMR spectrum of compound 11e.

Figure S39. <sup>1</sup>H NMR spectrum of compound 11f.Figure S40. <sup>13</sup>C NMR spectrum of compound 11f.