

Supplementary Materials: Enantiopure Trisubstituted Tetrahydrofurans with Appendage Diversity: Vinyl Sulfone- and Vinyl Sulfoxide-Modified Furans Derived from Carbohydrates as Synthons for Diversity Oriented Synthesis

Debanjana Dey and Tanmaya Pathak

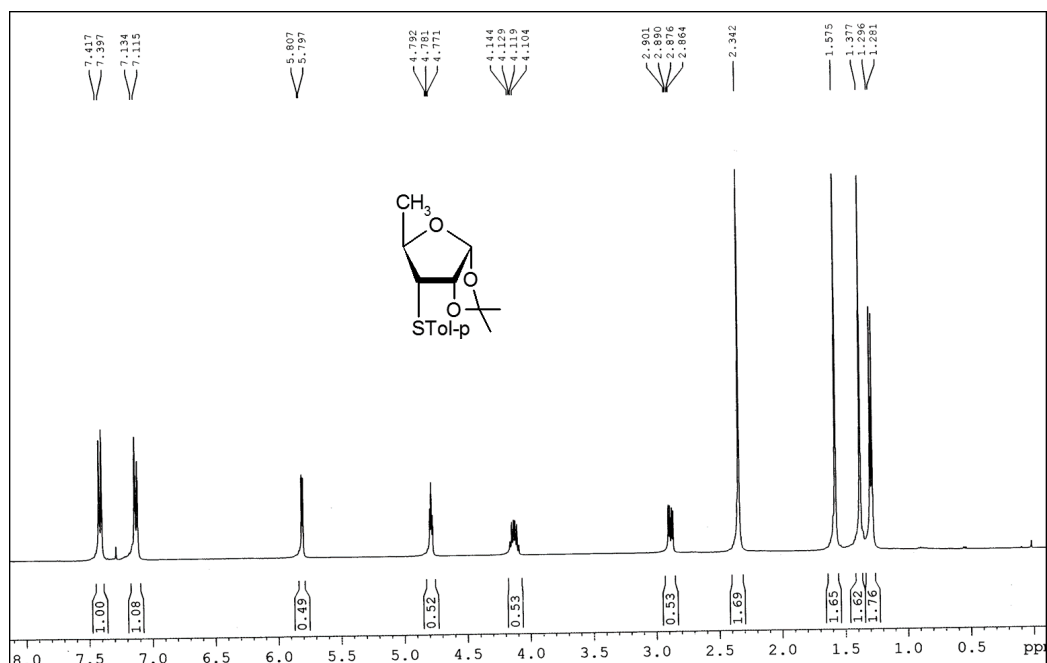


Figure S1. ¹H-NMR spectrum of compound 6.

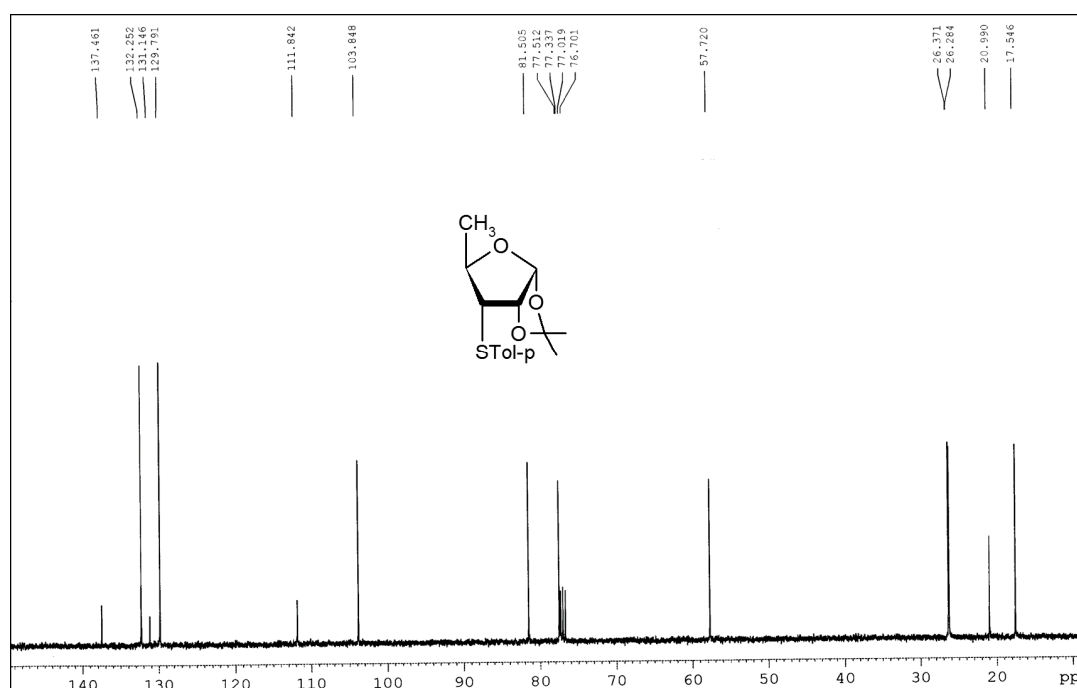


Figure S2. ¹³C-NMR spectrum of compound 6.

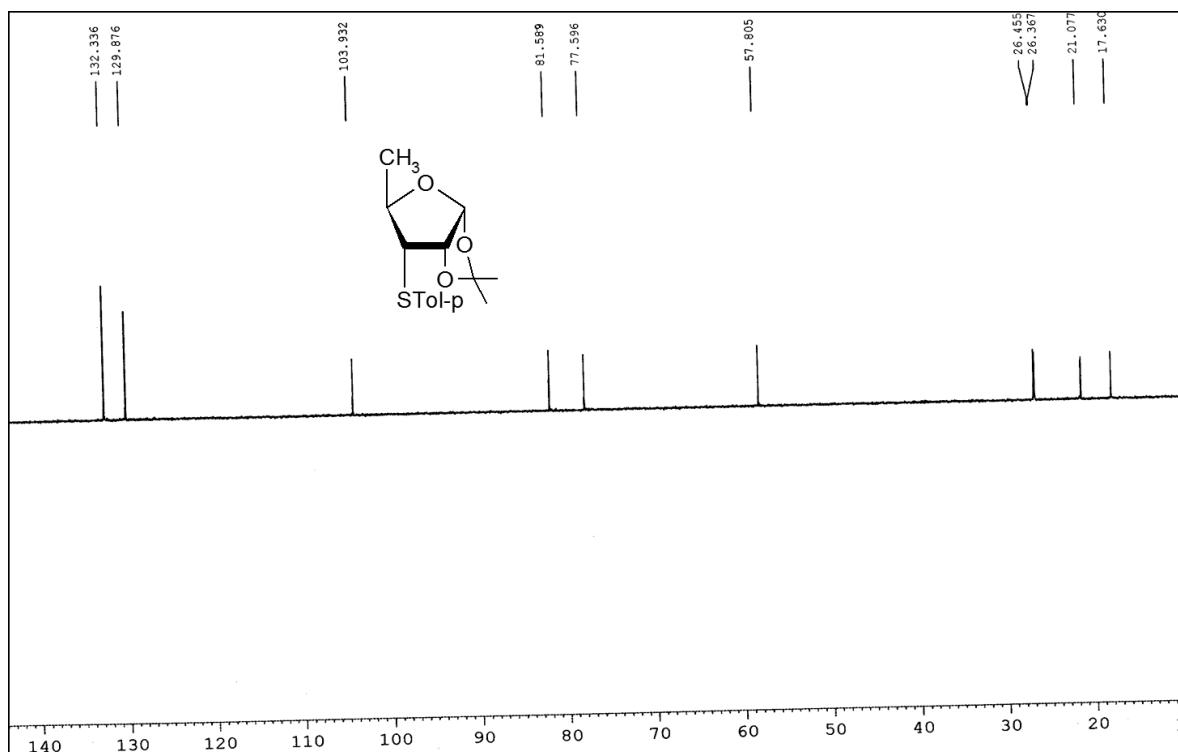
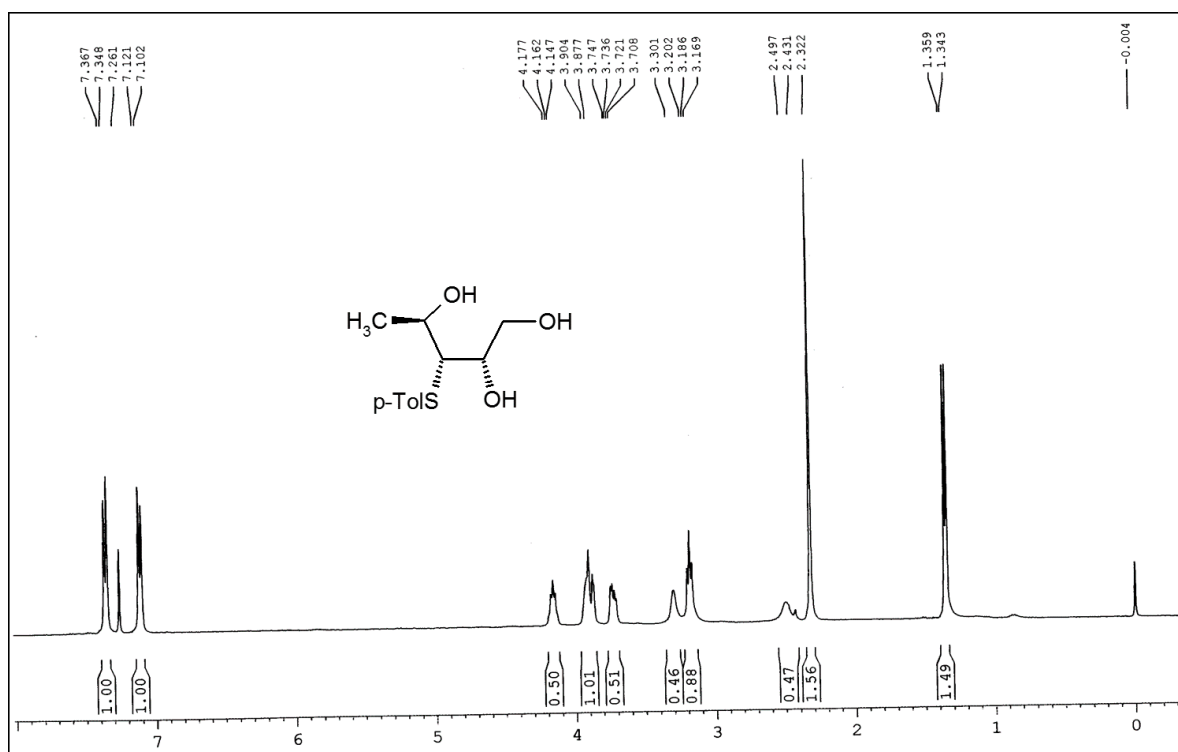


Figure S3. DEPT spectrum of compound 6.

Figure S4. ¹H-NMR spectrum of compound 7.

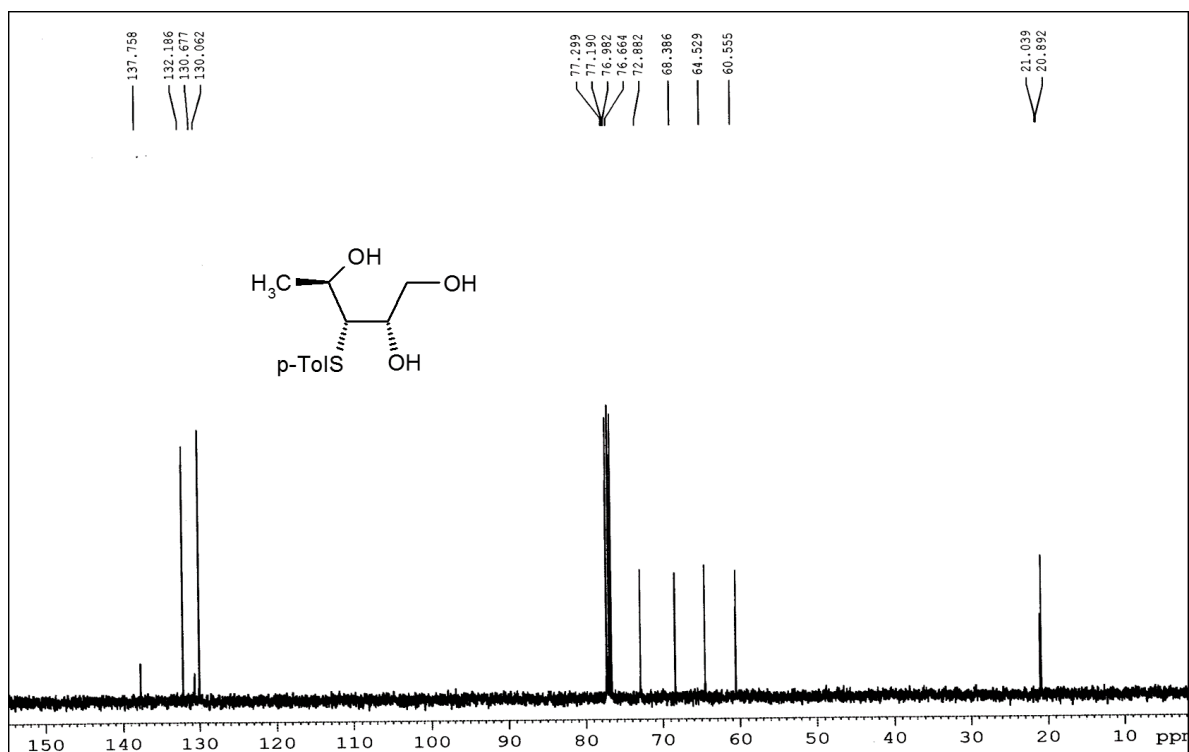
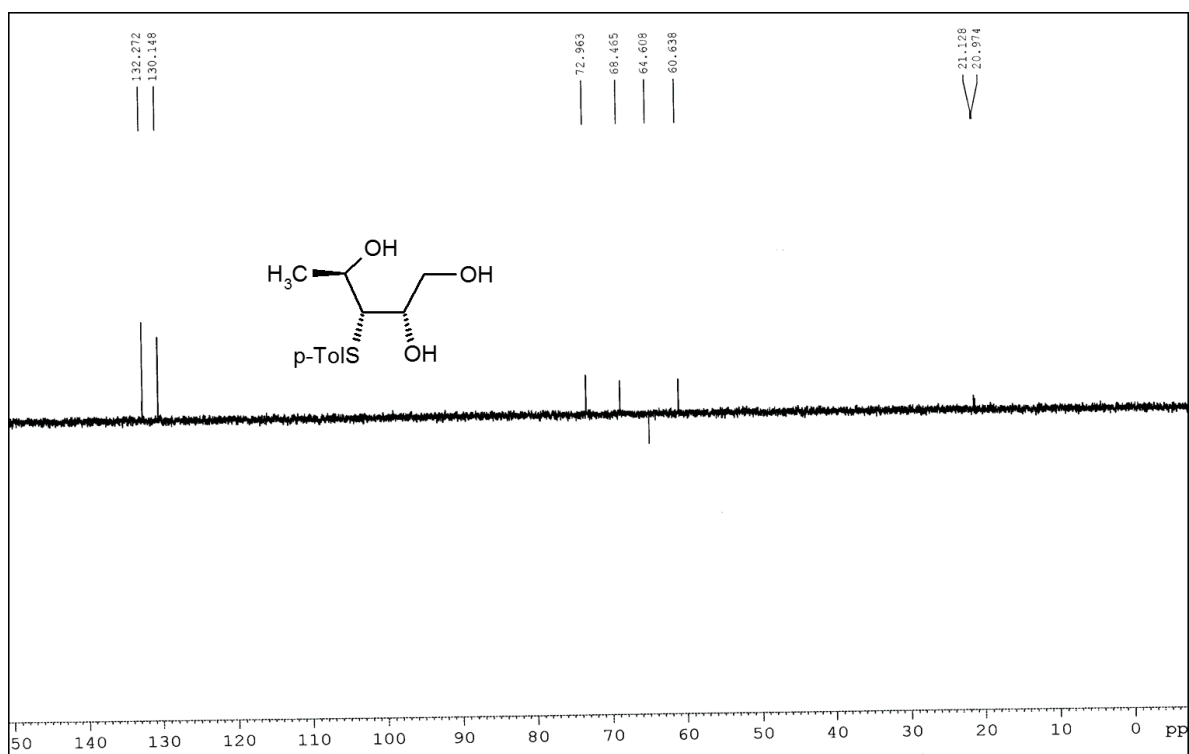
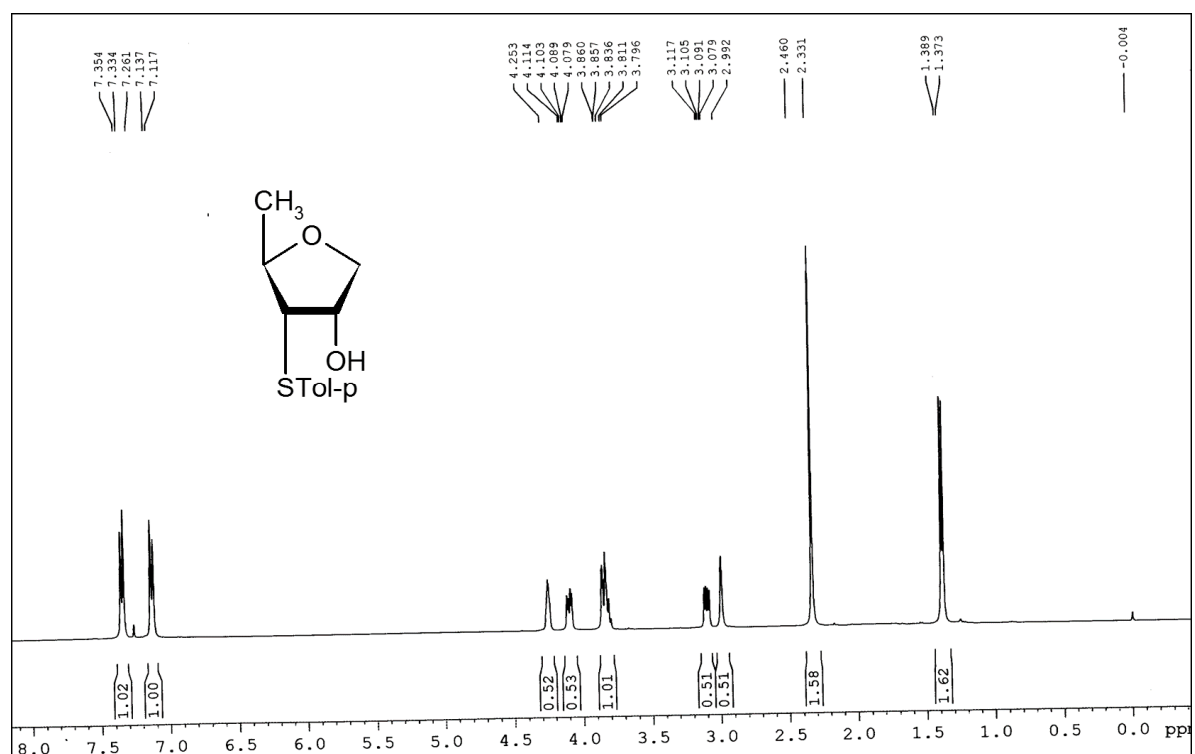
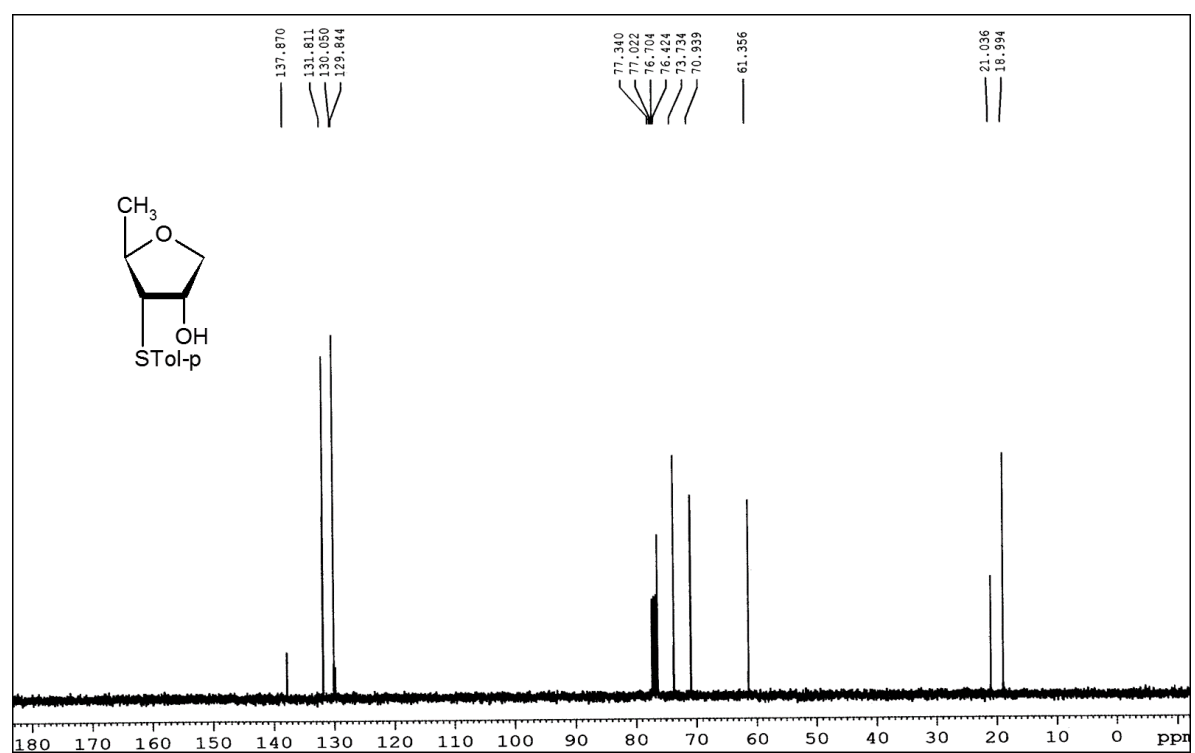
Figure S5. ¹³C-NMR spectrum of compound 7.

Figure S6. DEPT spectrum of compound 7.

Figure S7. ¹H-NMR spectrum of compound 8.Figure S8. ¹³C-NMR spectrum of compound 8.

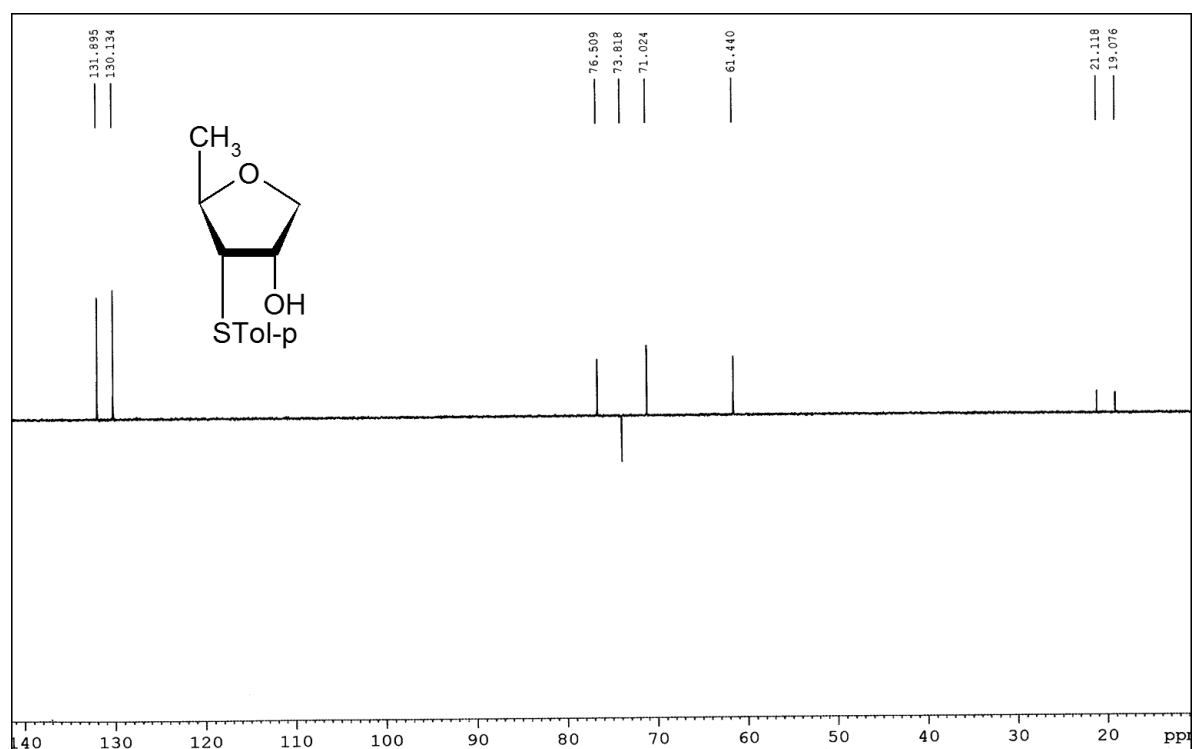
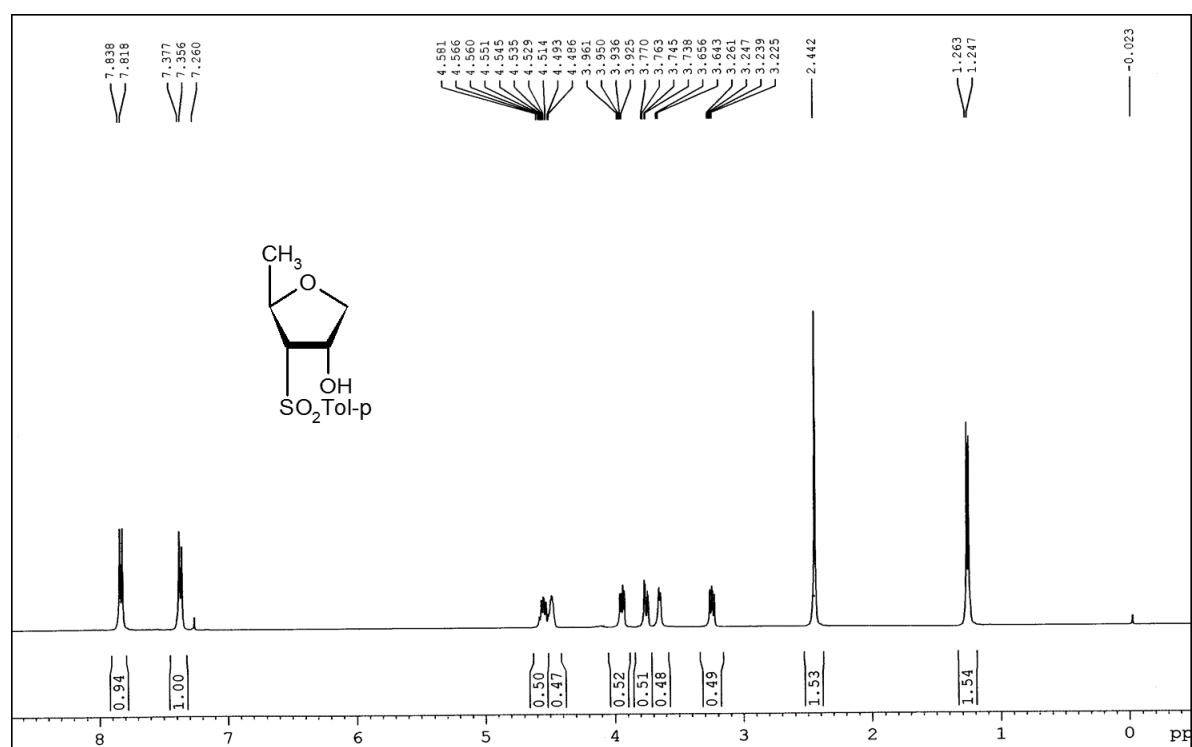


Figure S9. DEPT spectrum of compound 8.

Figure S10. ¹H-NMR spectrum of compound 9.

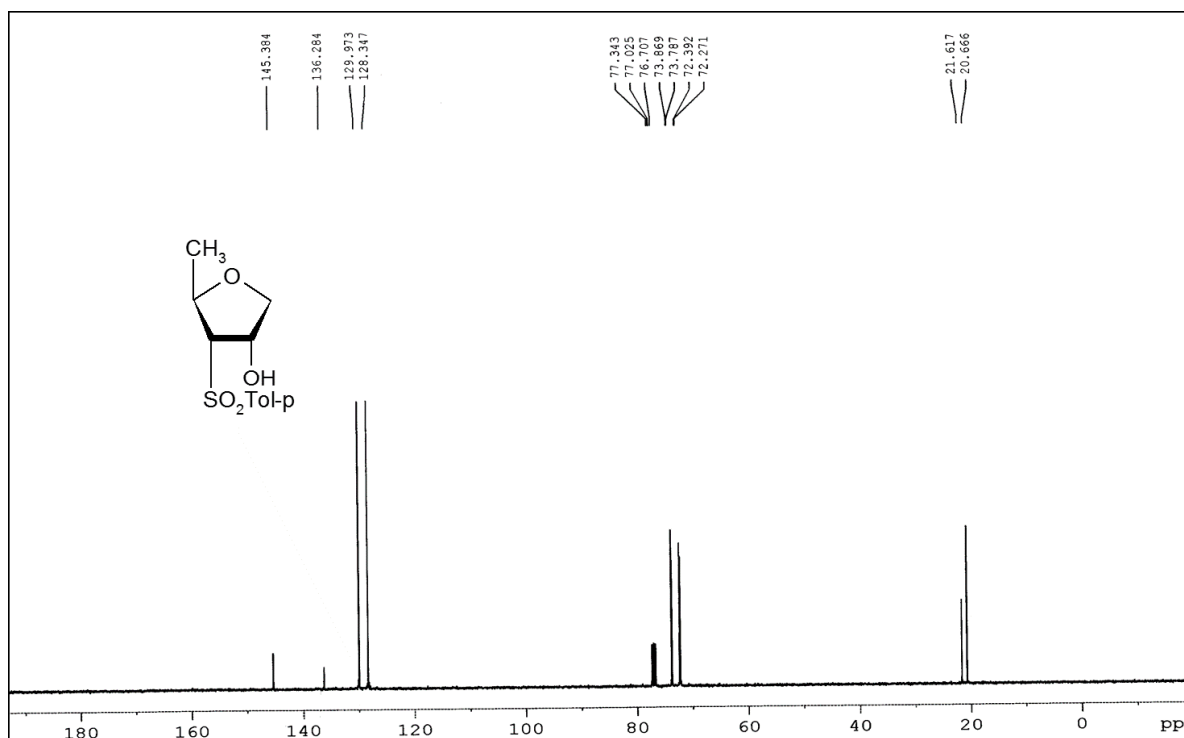
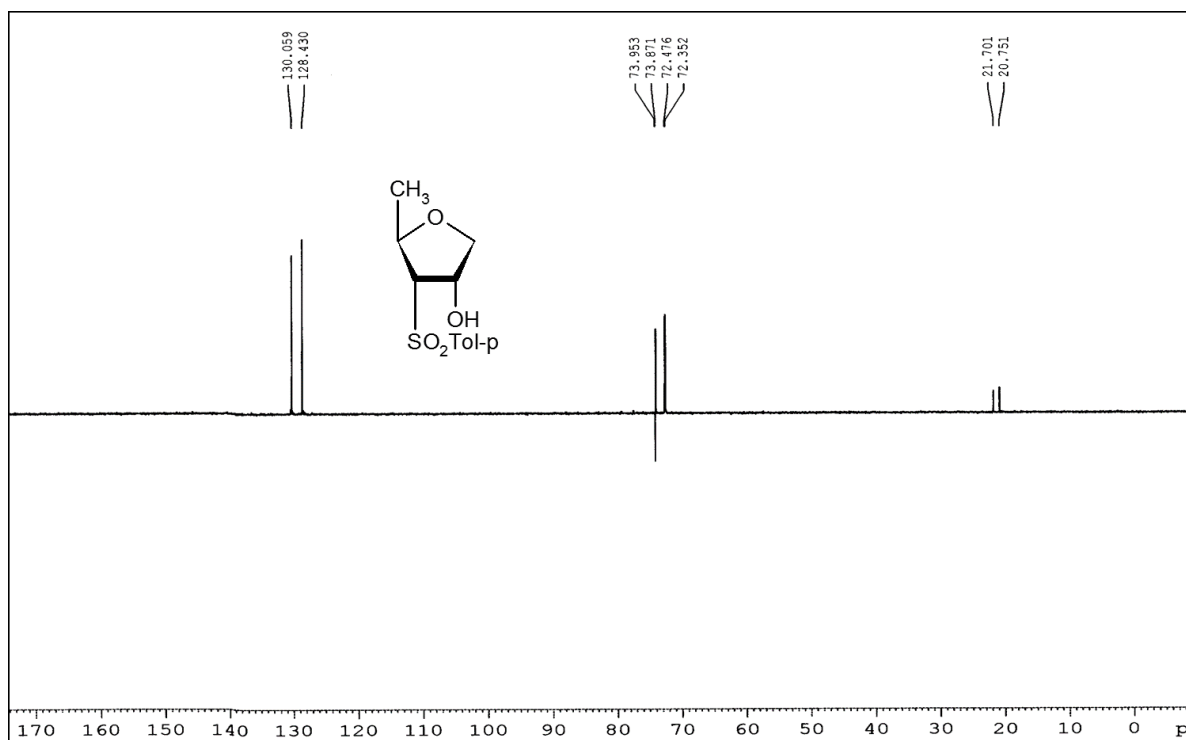
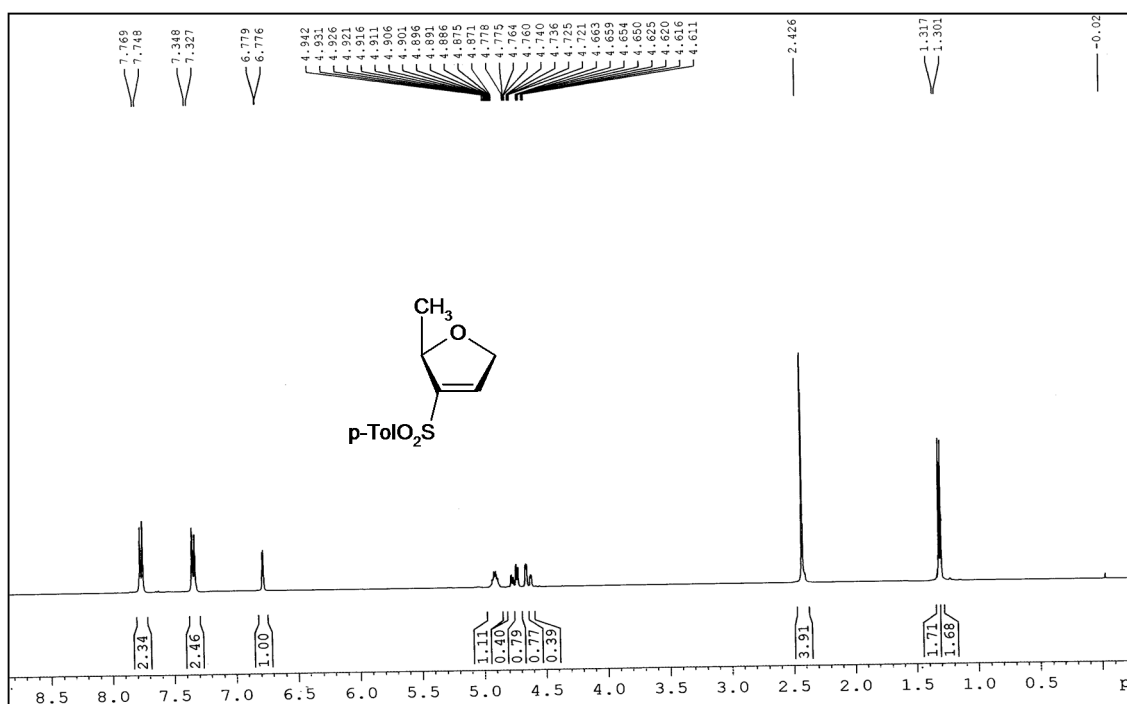
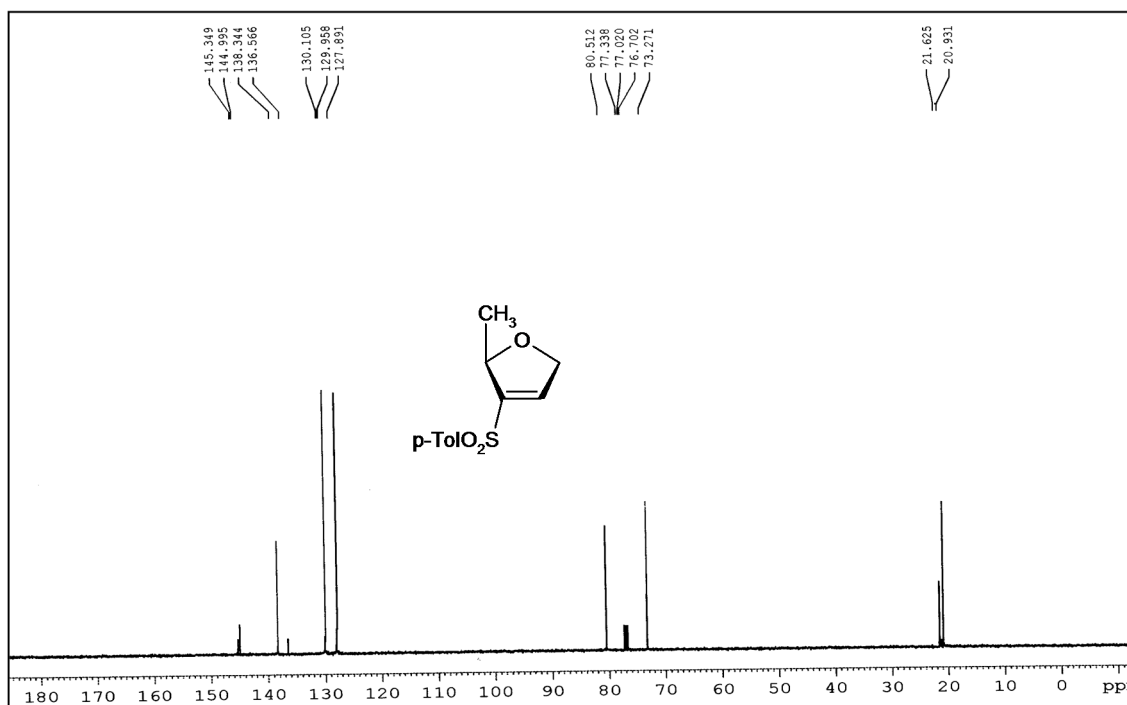
Figure S11. ¹³C-NMR spectrum of compound 9.

Figure S12. DEPT spectrum of compound 9.

Figure S13. ¹H-NMR spectrum of compound 10.Figure S14. ¹³C-NMR spectrum of compound 10.

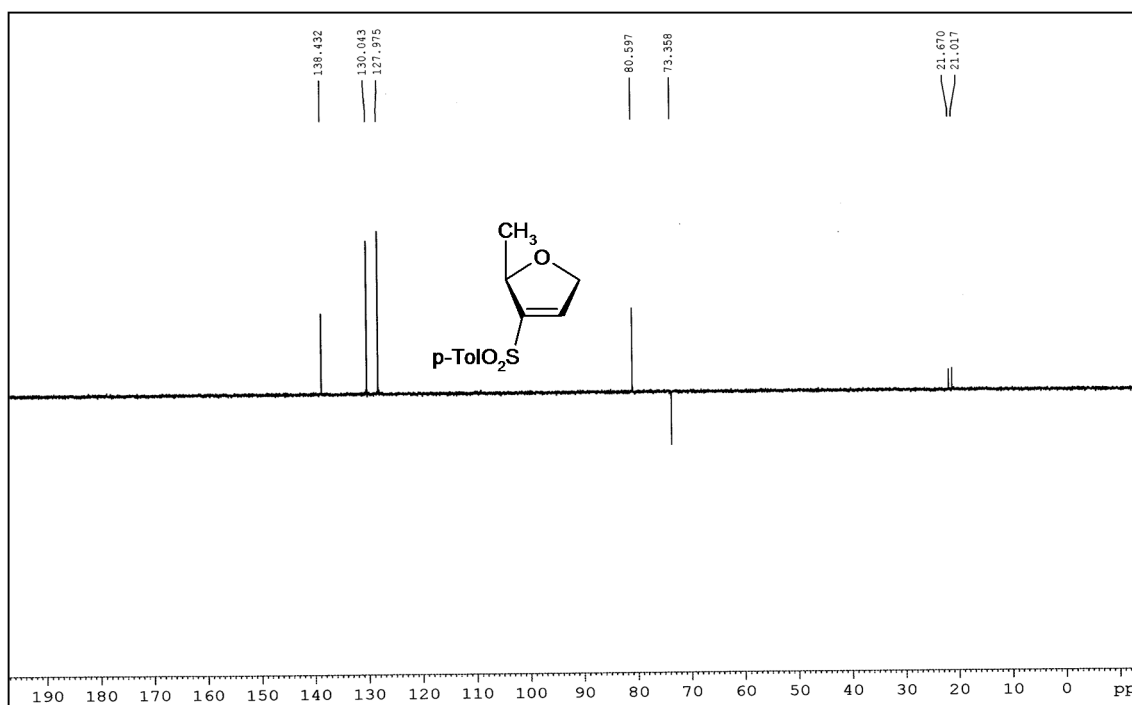
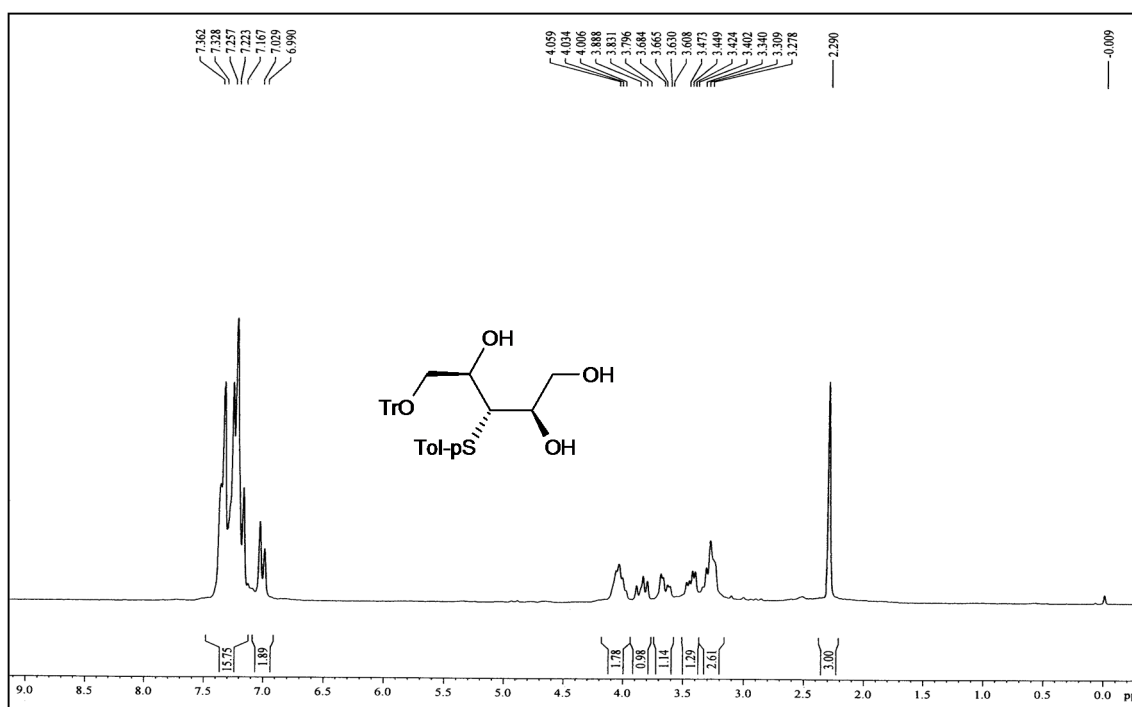


Figure S15. DEPT spectrum of compound 10.

Figure S16. ¹H-NMR spectrum of compound 13.

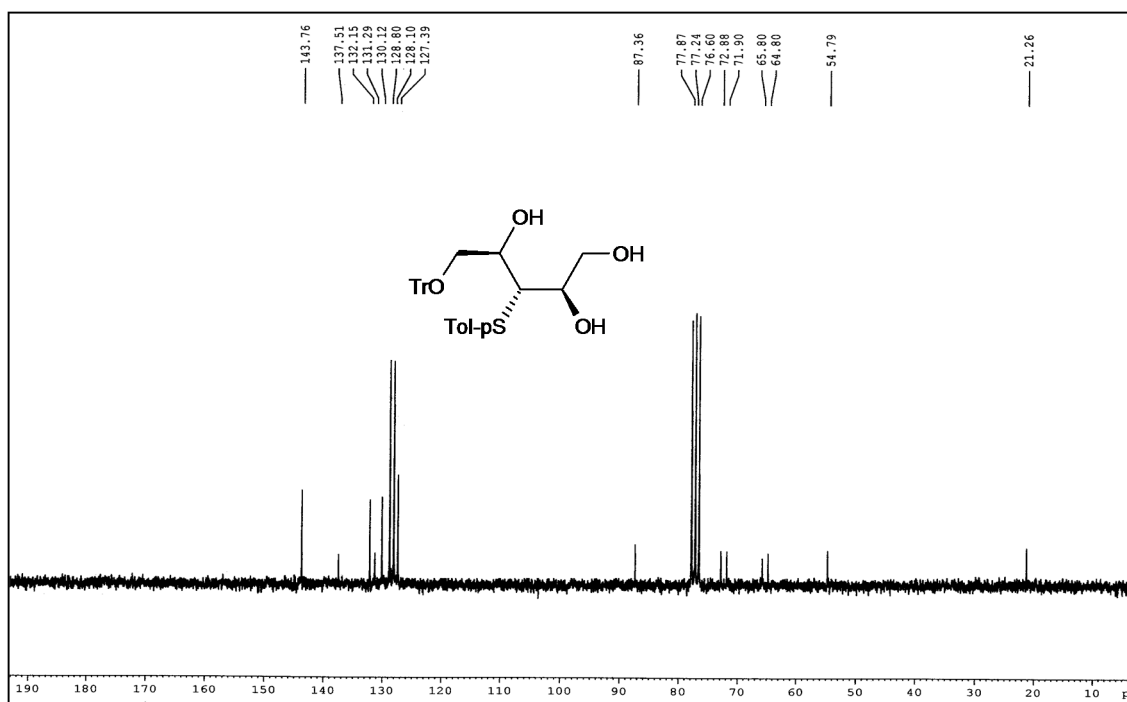
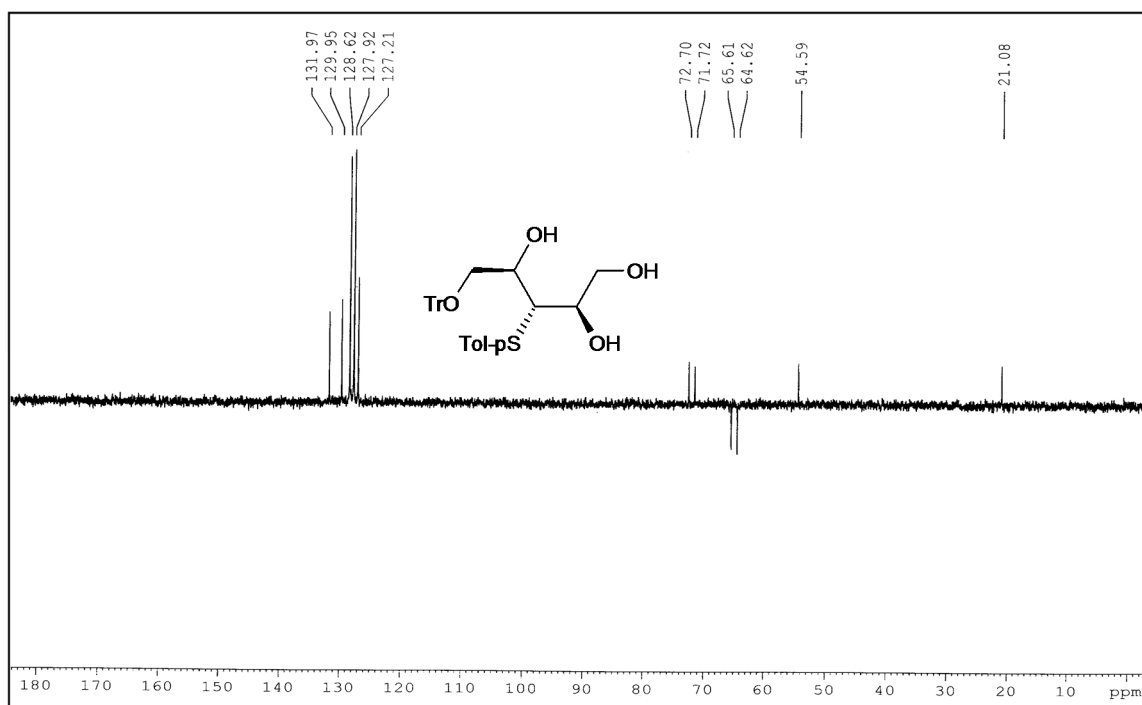
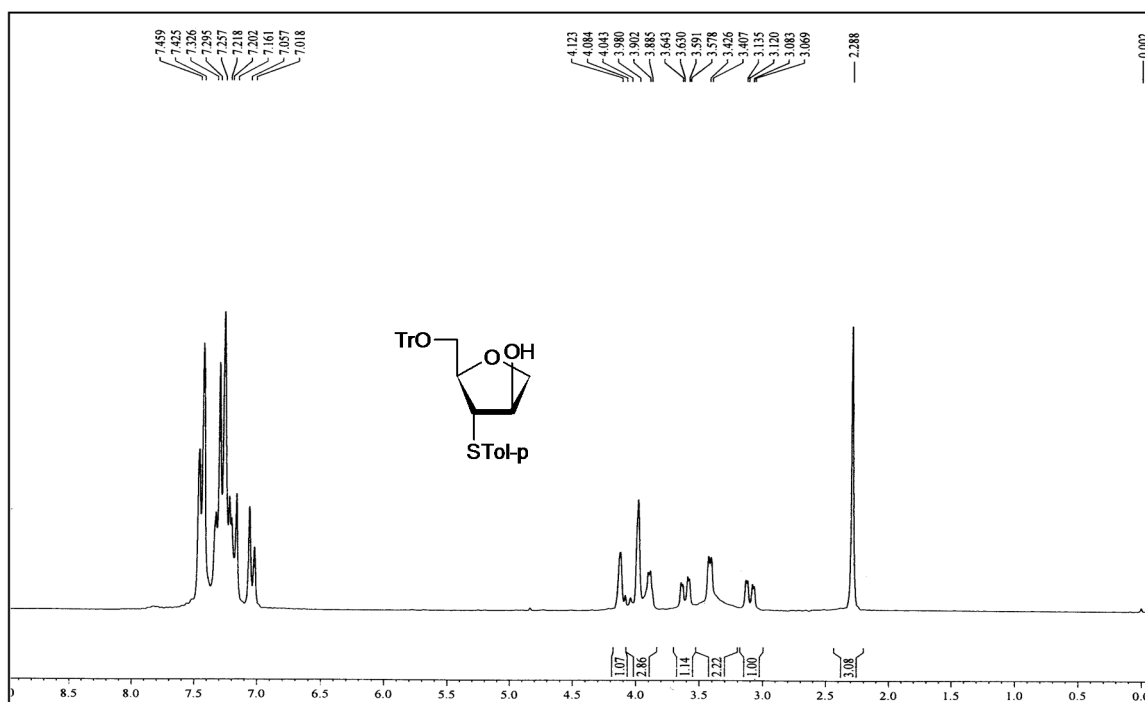
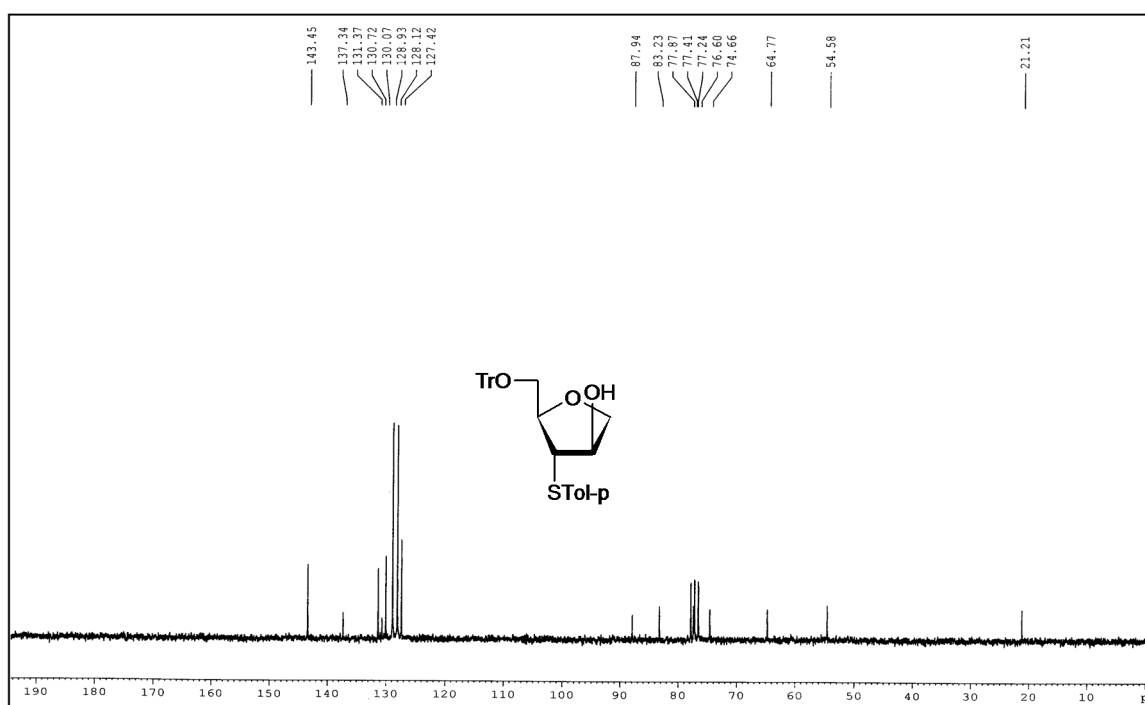
Figure S17. ¹³C-NMR spectrum of compound 13.

Figure S18. DEPT spectrum of compound 13.

Figure S19. ¹H-NMR spectrum of compound 14.Figure S20. ¹³C-NMR spectrum of compound 14.

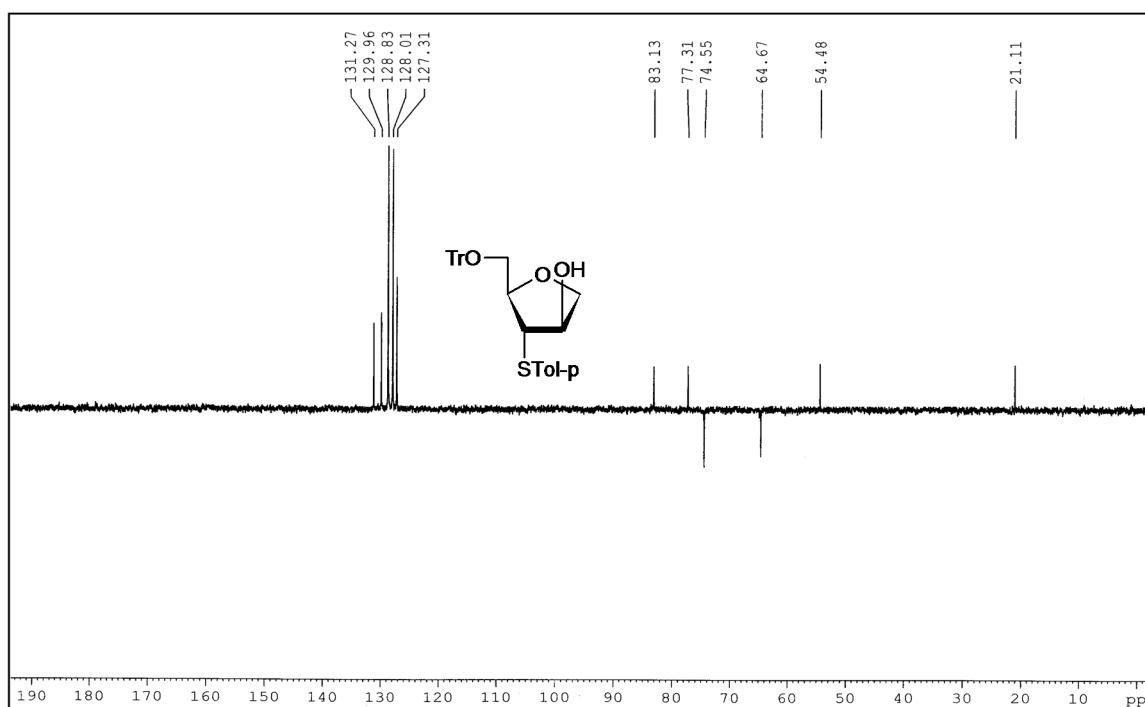
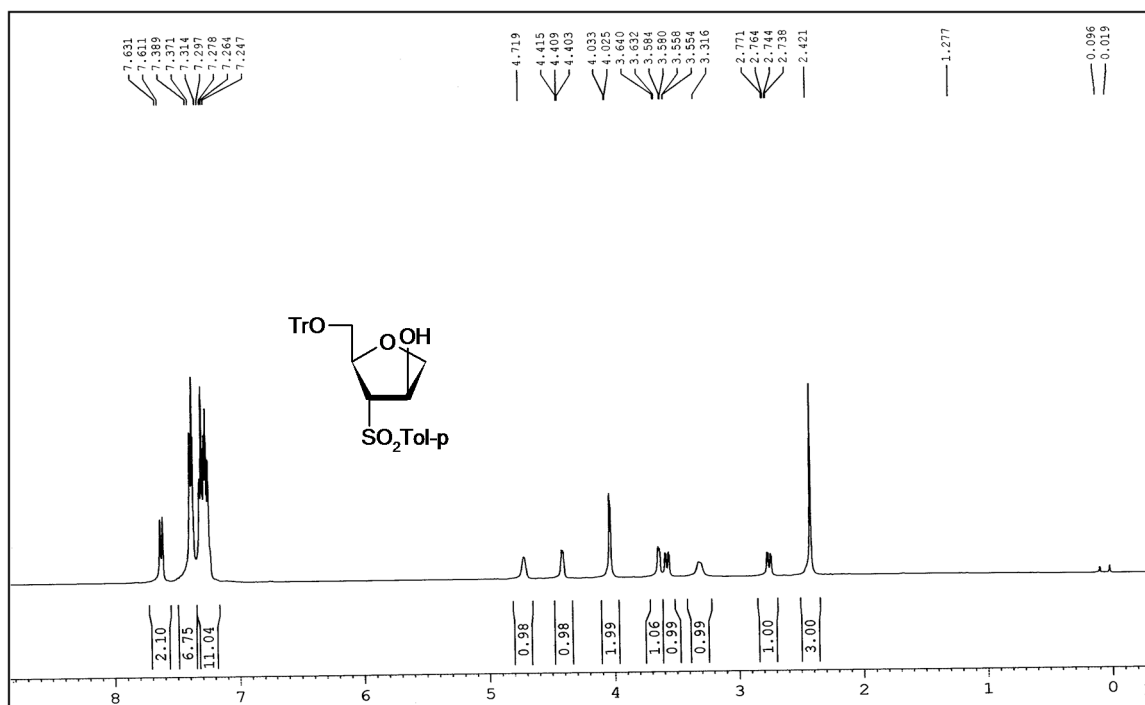


Figure S21. DEPT spectrum of compound 14.

Figure S22. ¹H-NMR spectrum of compound 15.

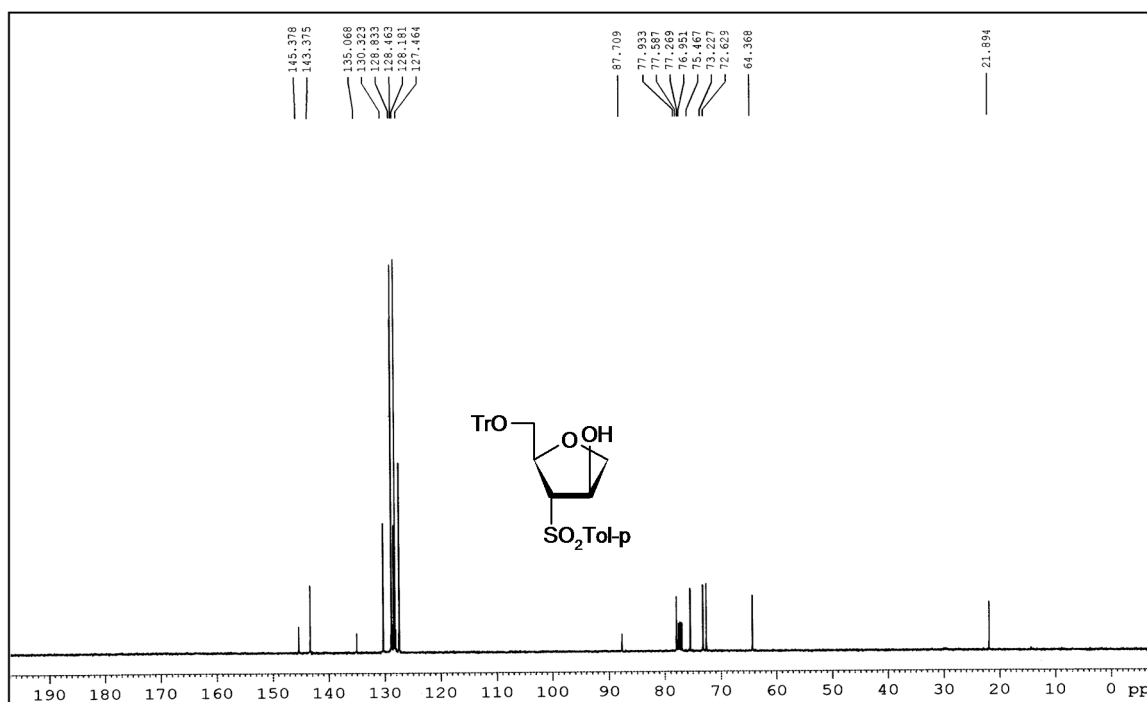


Figure S23. ^{13}C -NMR spectrum of compound **15**.

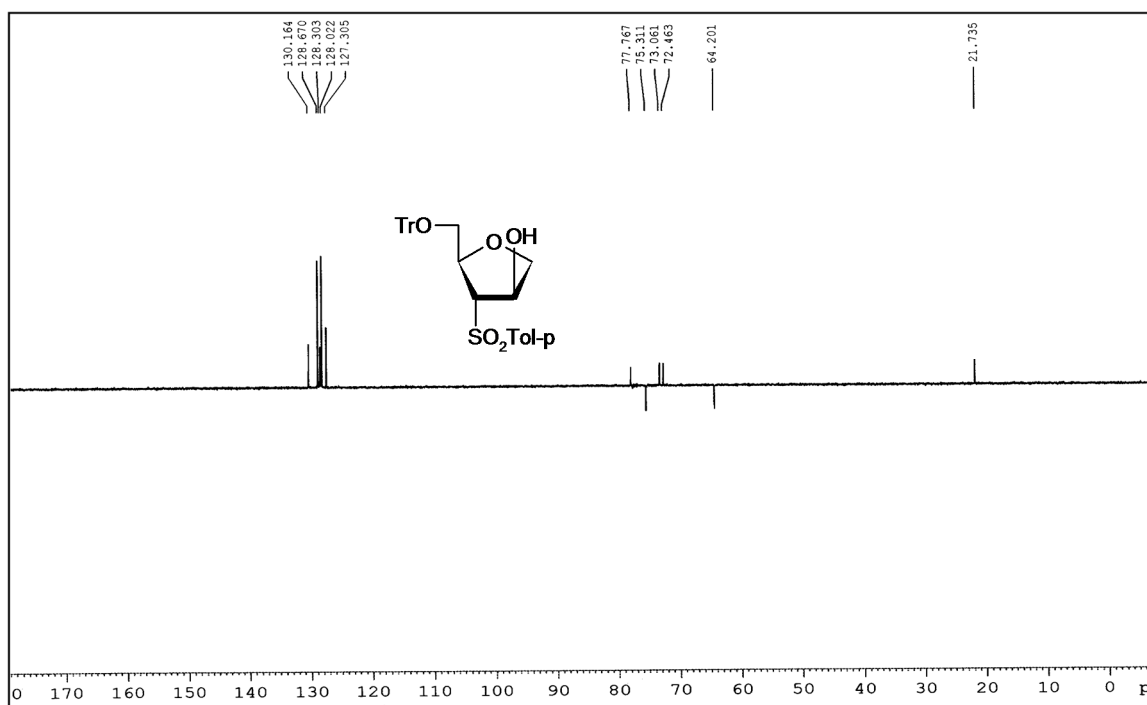
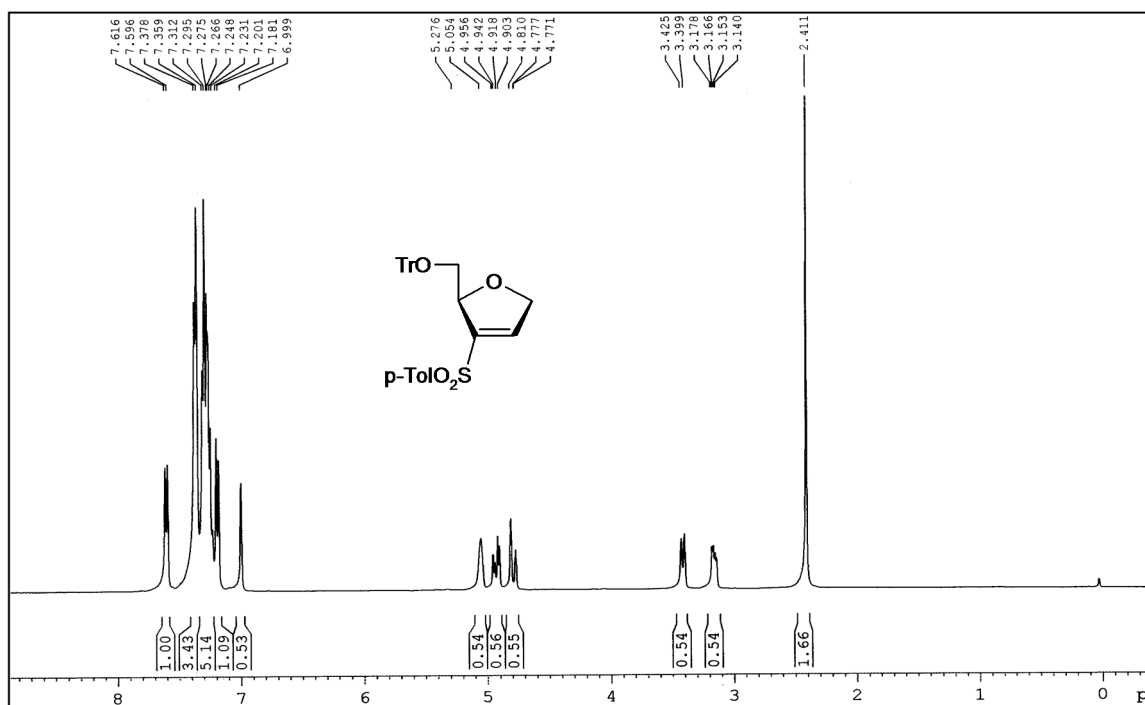
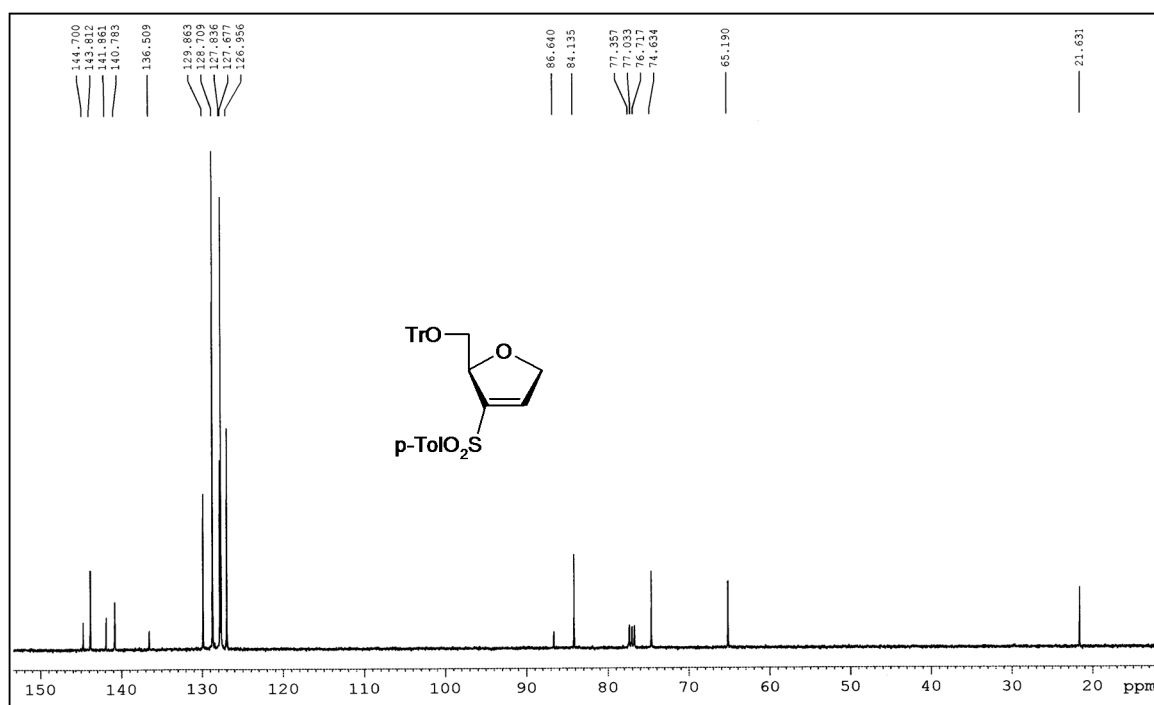


Figure S24. DEPT spectrum of compound **15**.

Figure S25. ¹H-NMR spectrum of compound 16.Figure S26. ¹³C-NMR spectrum of compound 16.

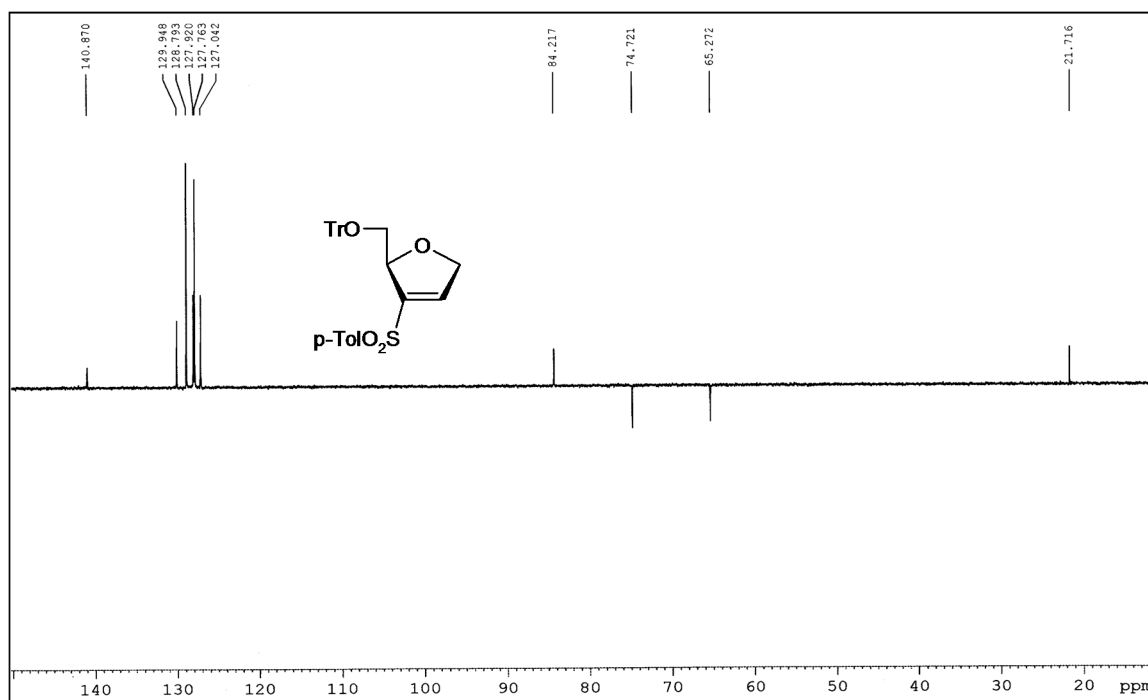
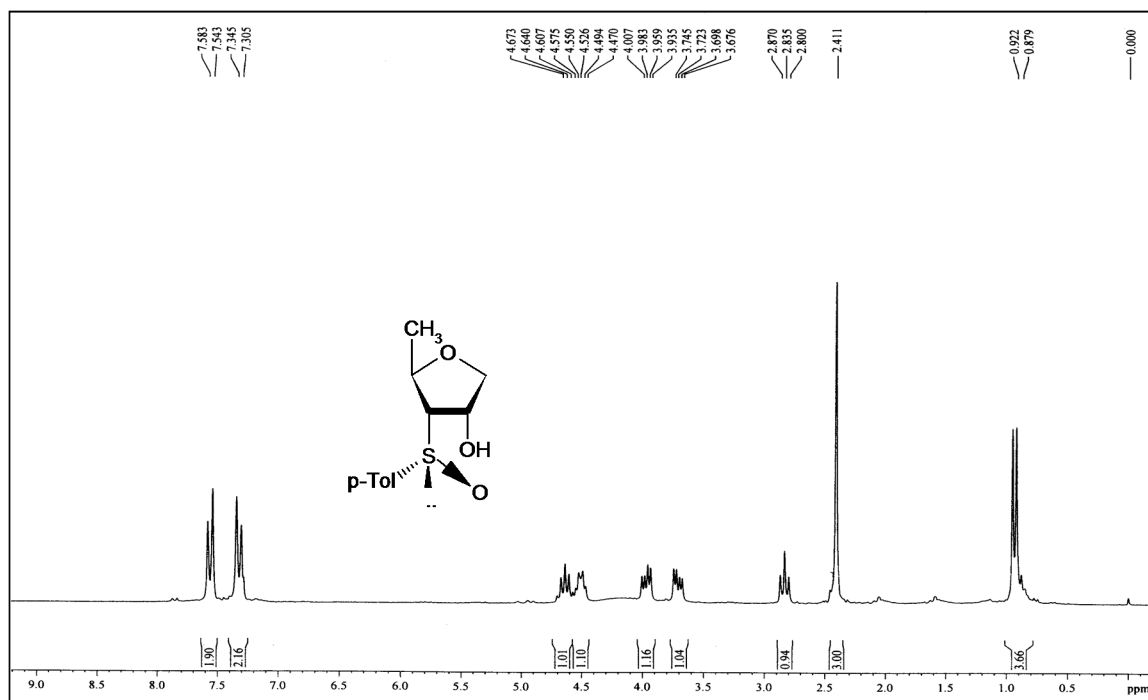


Figure S27. DEPT spectrum of compound 16.

Figure S28. ¹H-NMR spectrum of compound 17Ss.

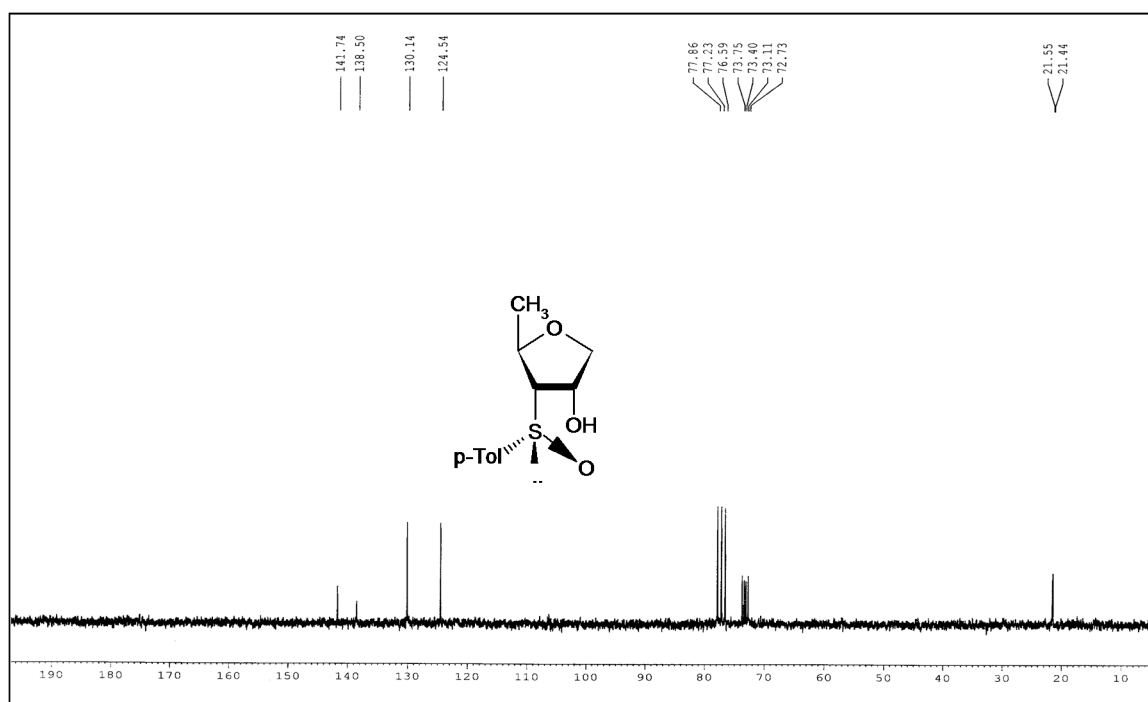
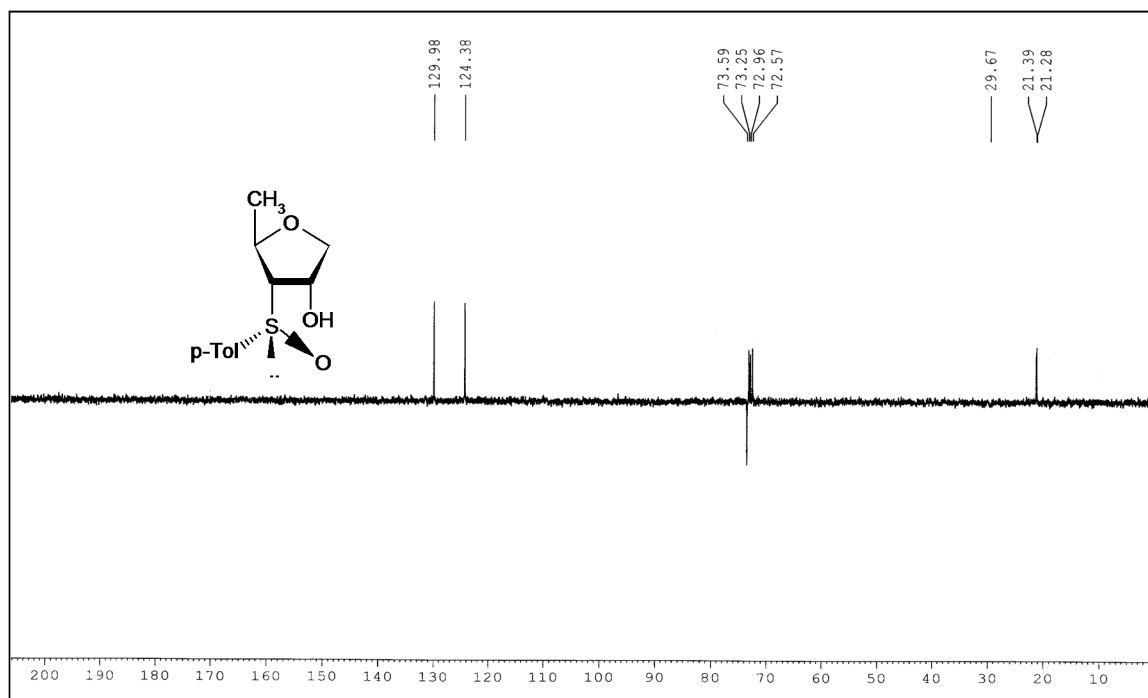
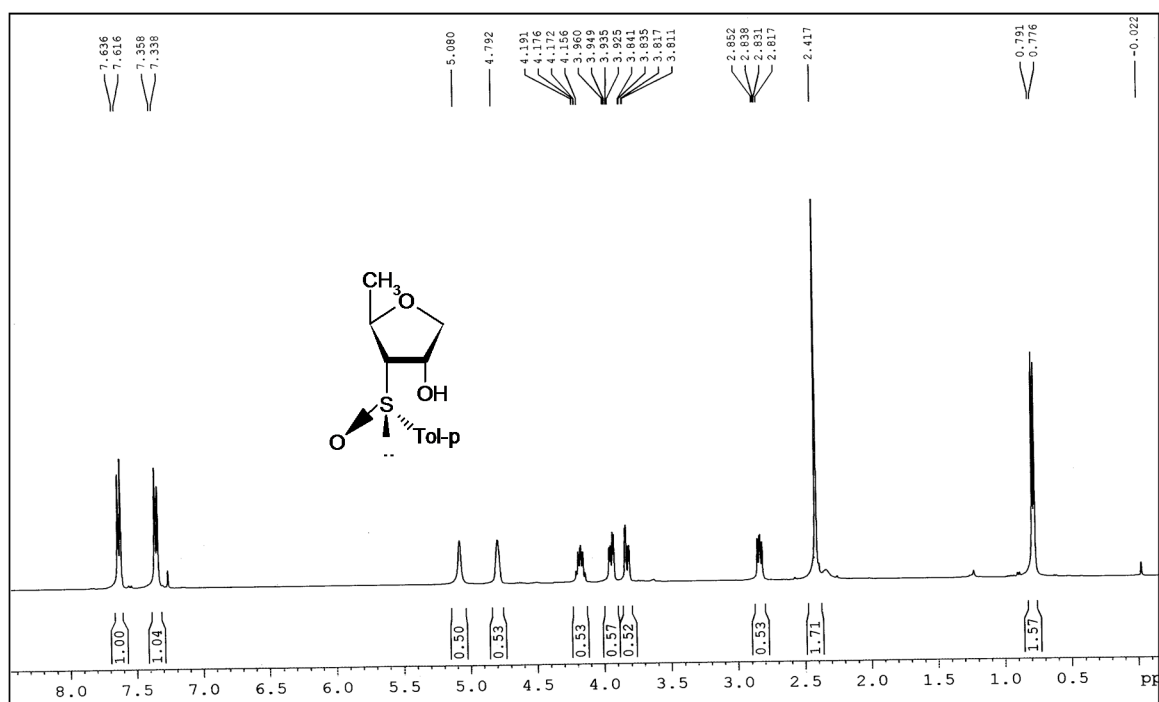
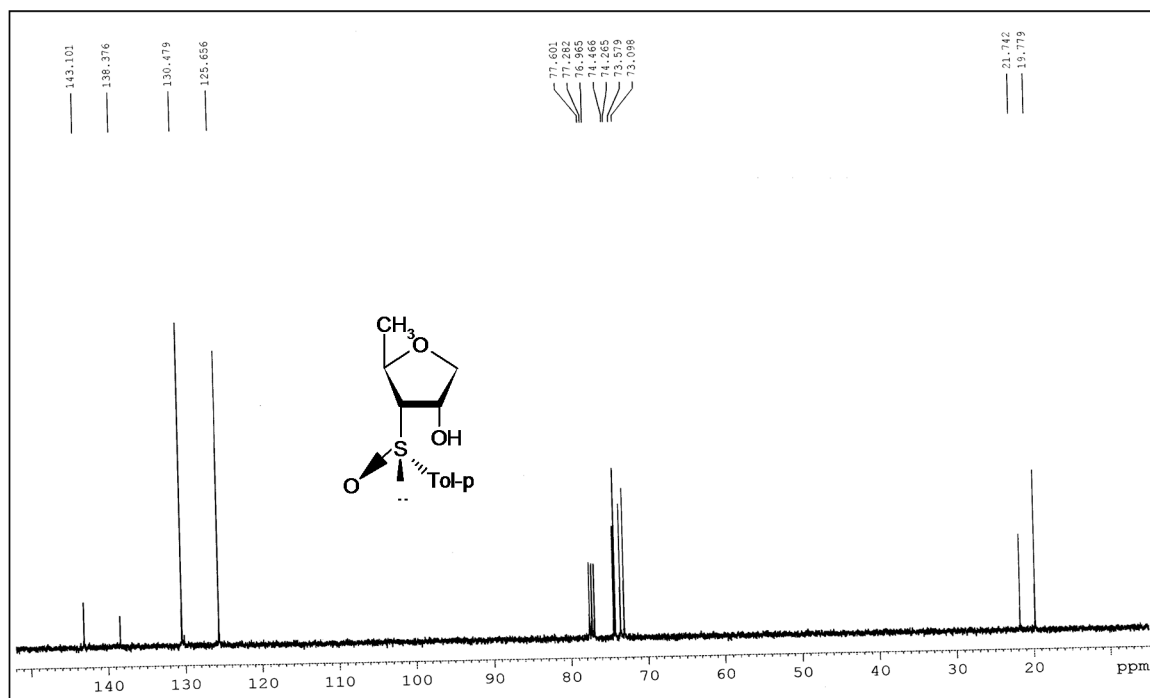
Figure S29. ¹³C-NMR spectrum of compound 17Ss.

Figure S30. DEPT spectrum of compound 17Ss.

Figure S31. ¹H-NMR spectrum of compound 17Rs.Figure S32. ¹³C-NMR spectrum of compound 17Rs.

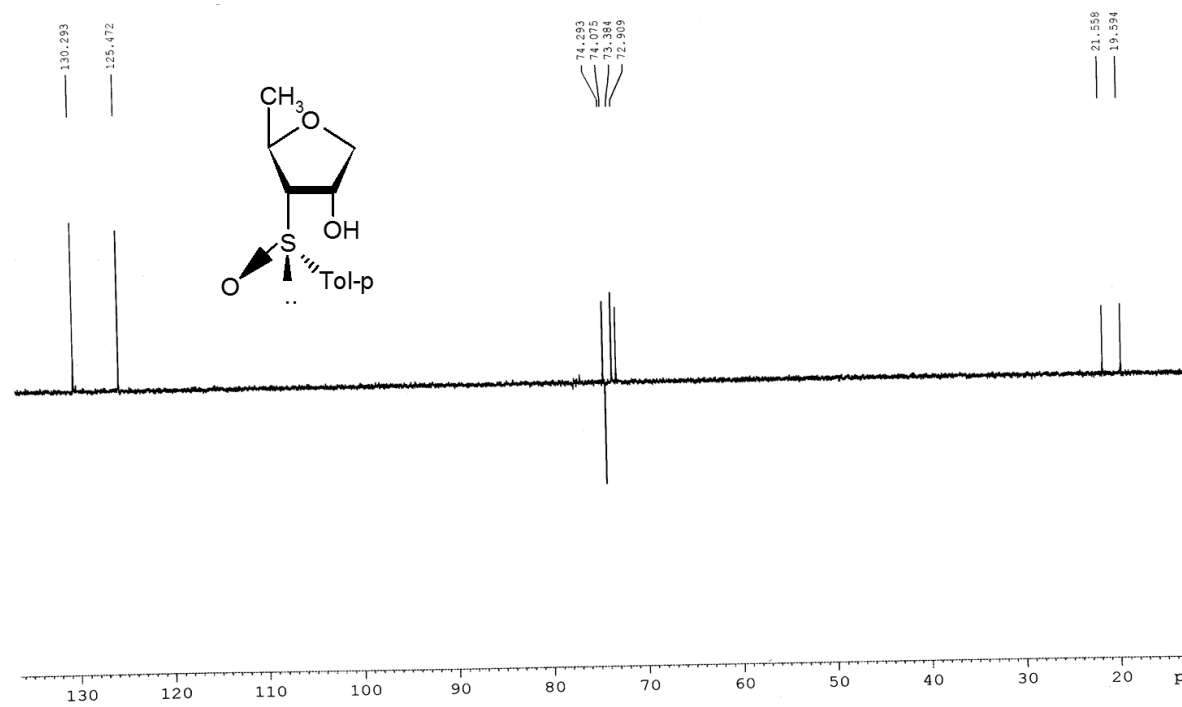
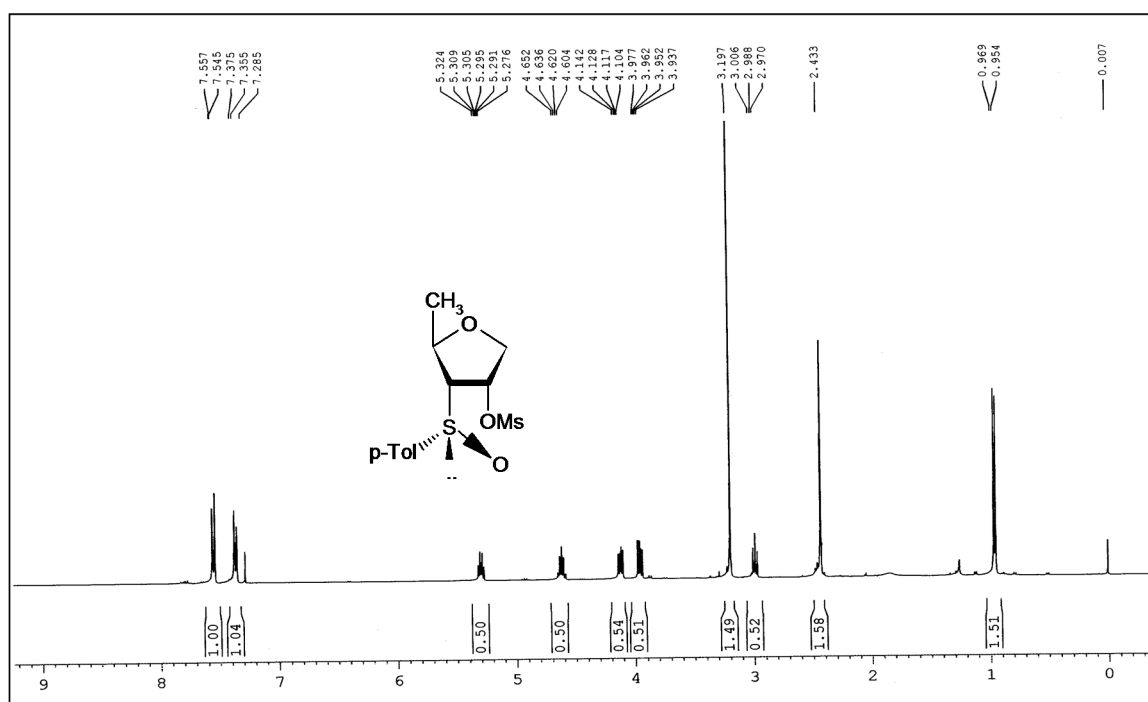


Figure S33. DEPT spectrum of compound 17Rs.

Figure S34. ¹H-NMR spectrum of compound 18Ss.

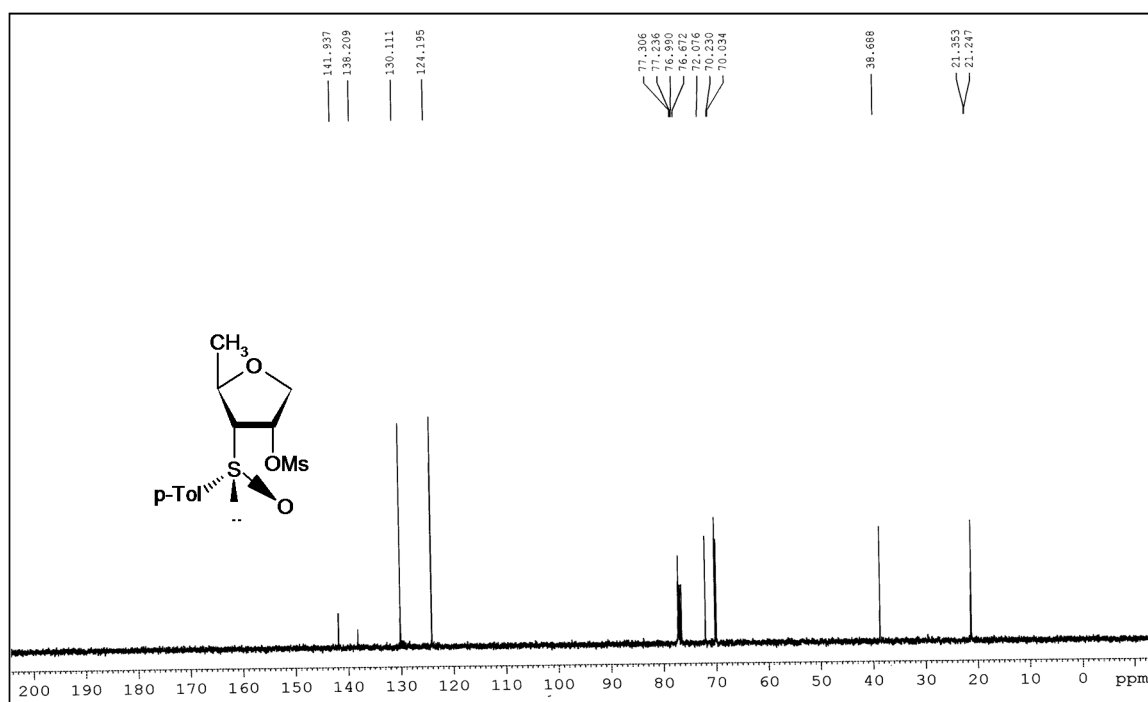
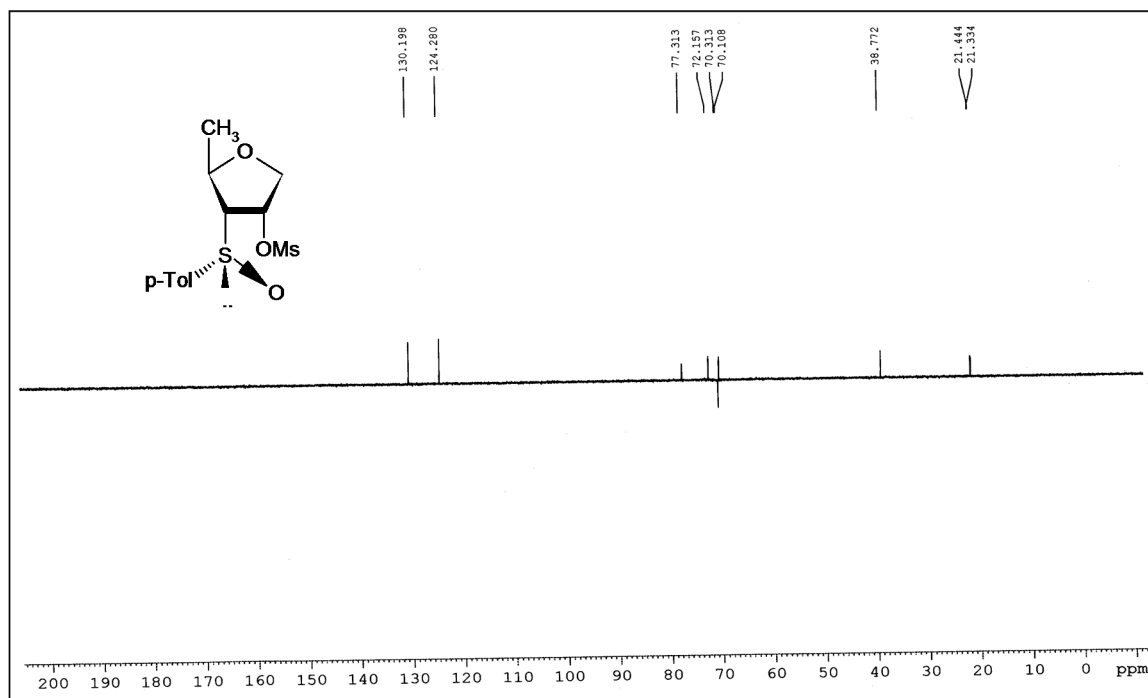
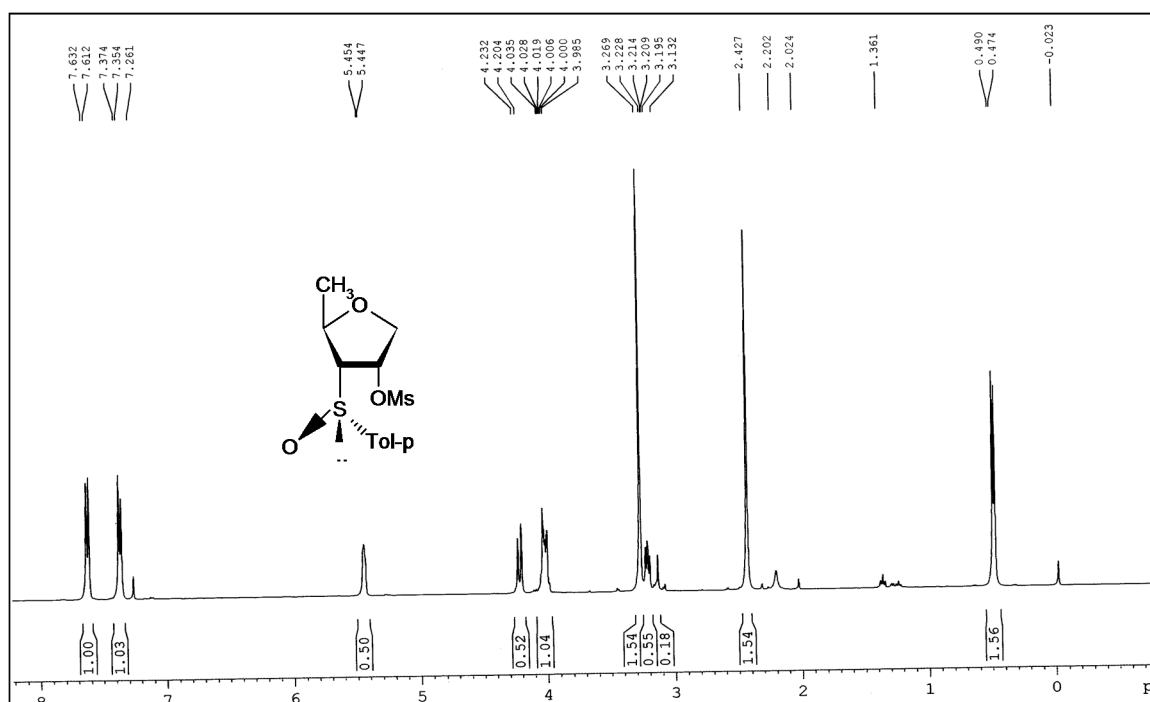
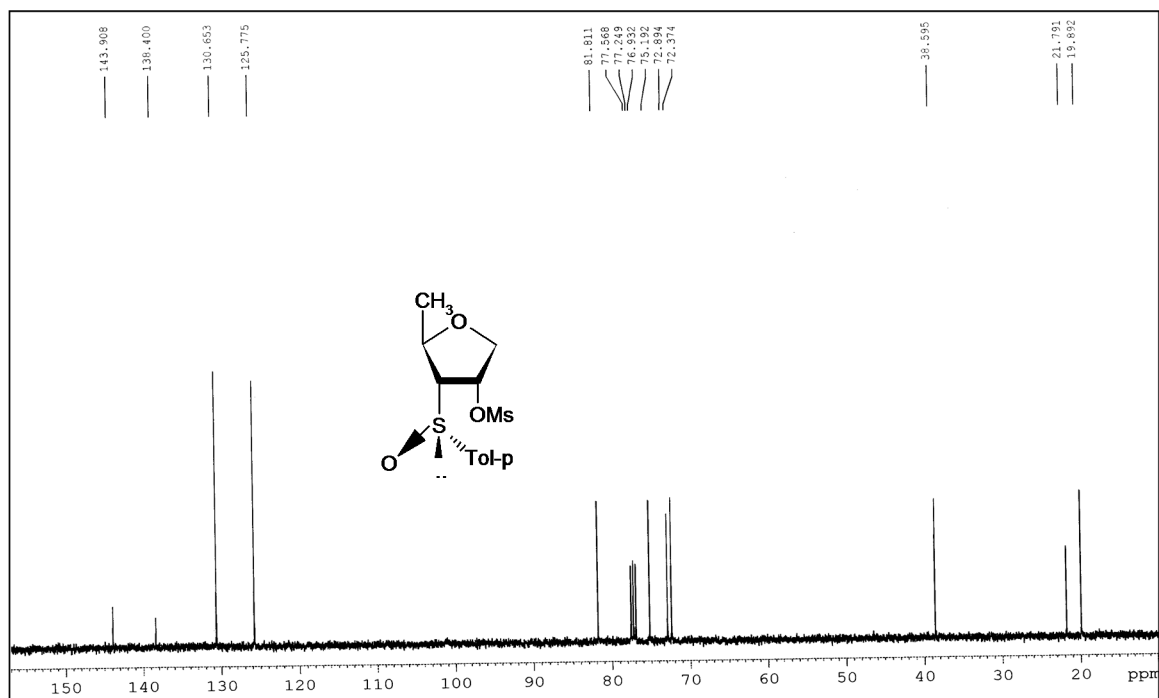
Figure S35. ¹³C-NMR spectrum of compound 18Ss.

Figure S36. DEPT spectrum of compound 18Ss.

Figure S37. ¹H-NMR spectrum of compound 18Rs.Figure S38. ¹³C-NMR spectrum of compound 18Rs.

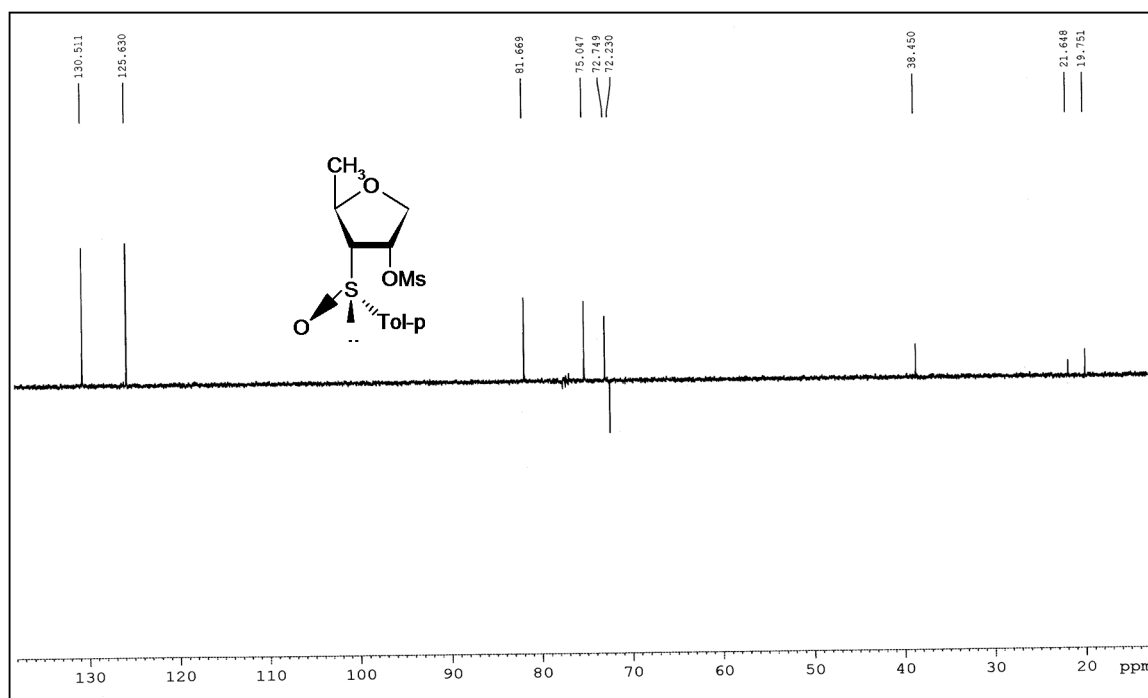
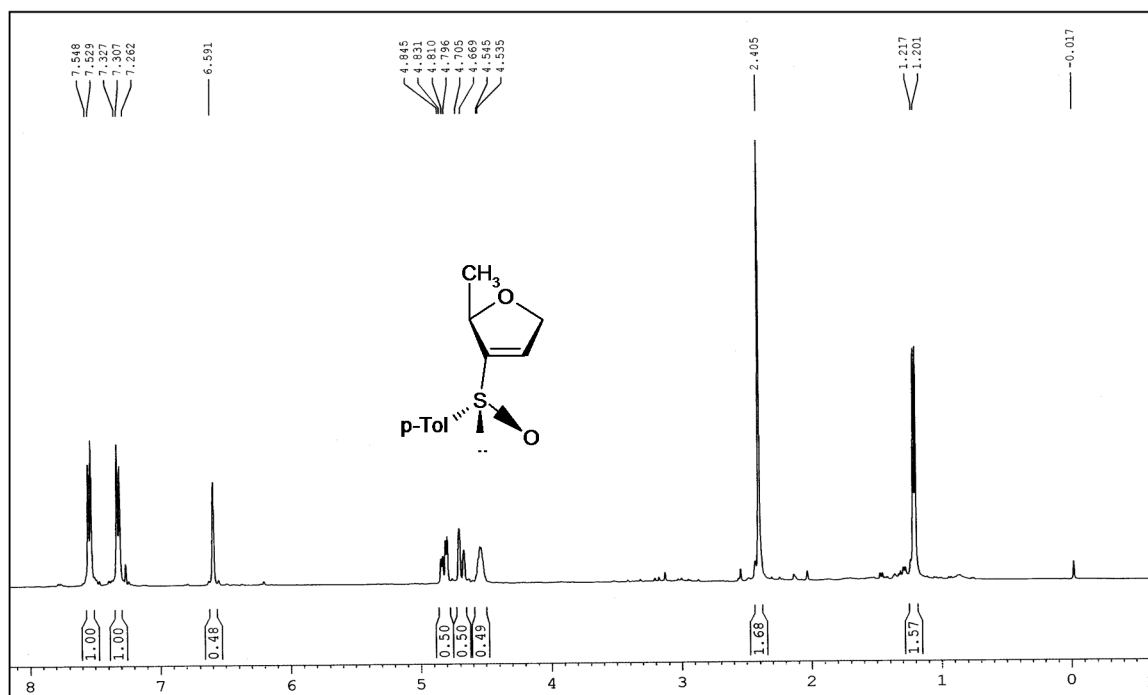
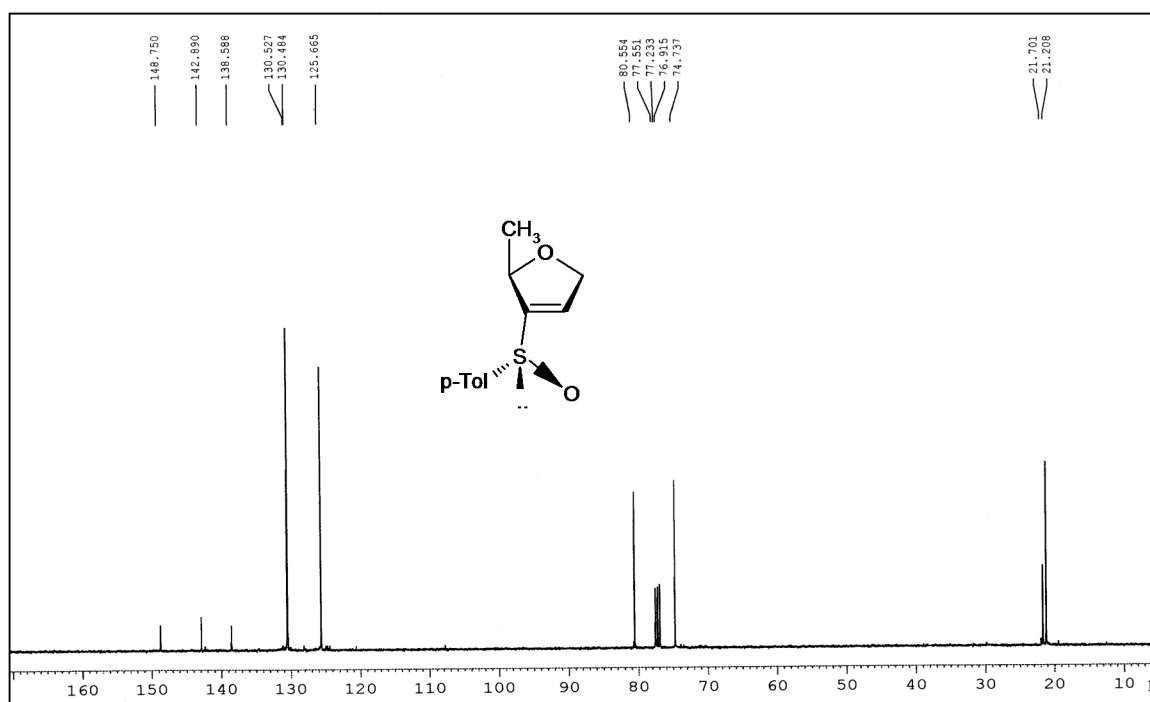
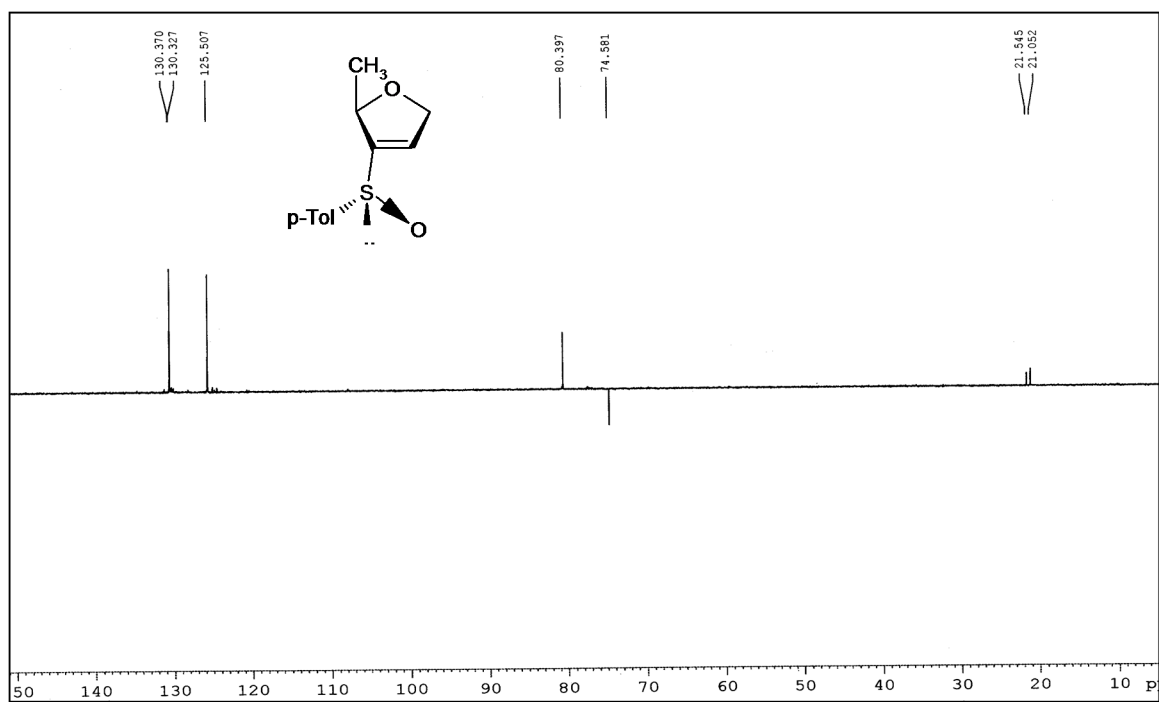
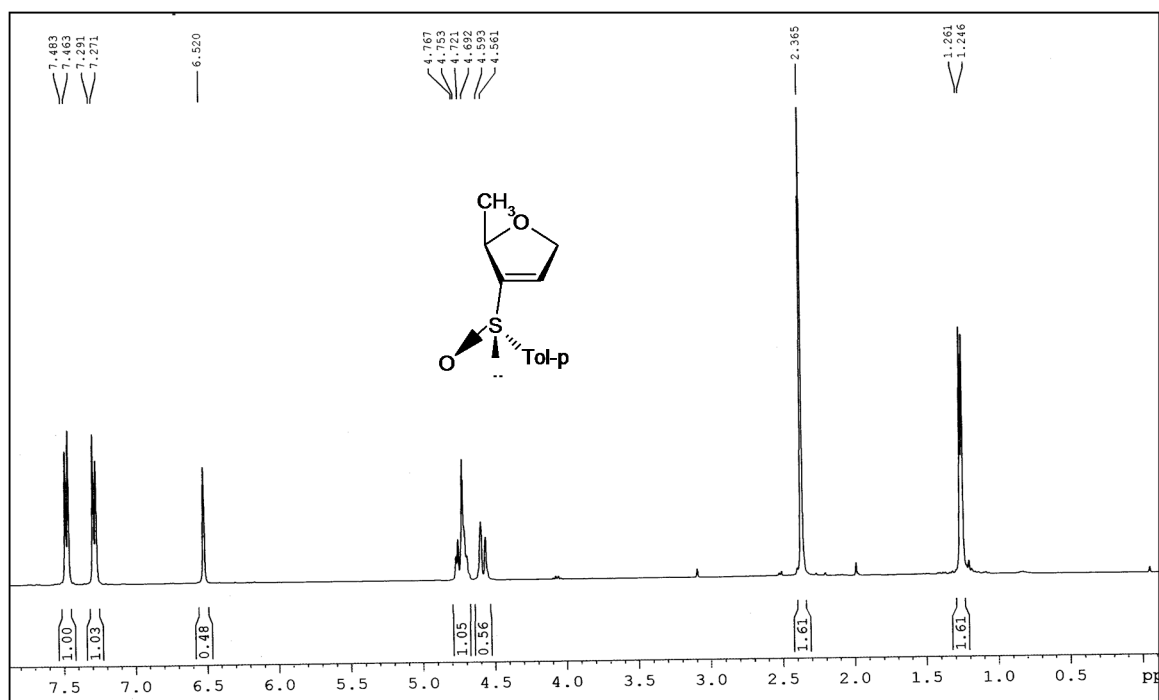
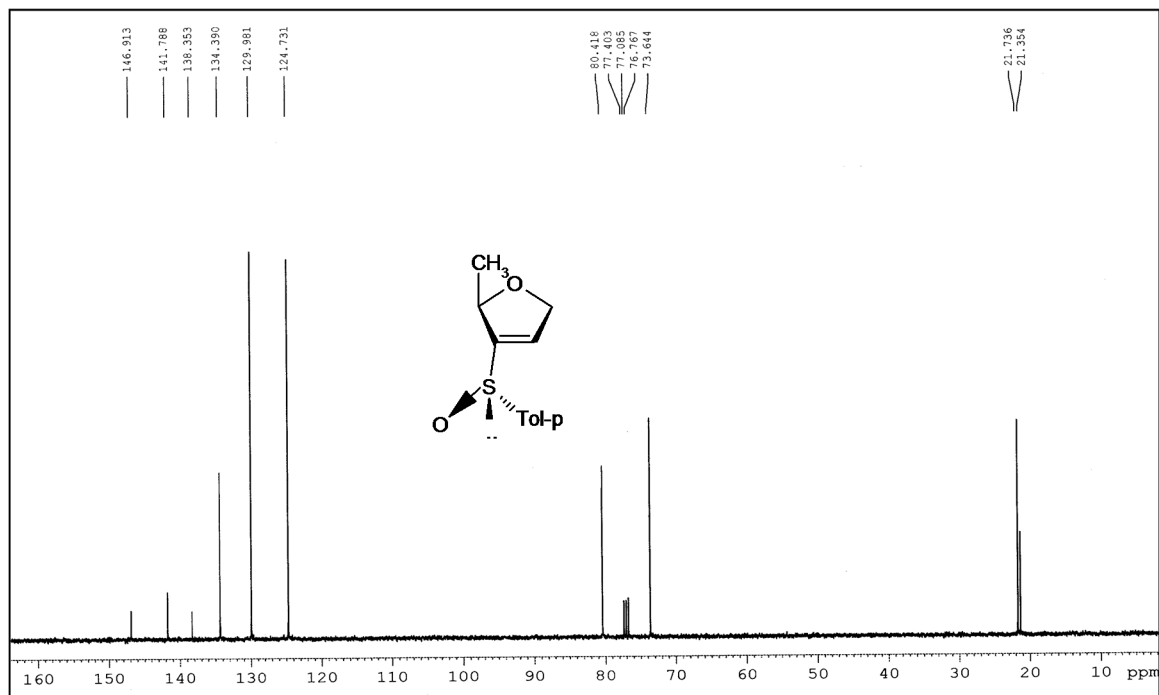


Figure S39. DEPT spectrum of compound 18Rs.

Figure S40. ¹H-NMR spectrum of compound 19Rs.

Figure S41. ¹³C-NMR spectrum of compound **19Rs**.Figure S42. DEPT spectrum of compound **19Rs**.

Figure S43. ¹H-NMR spectrum of compound 19Ss.Figure S44. ¹³C-NMR spectrum of compound 19Ss.

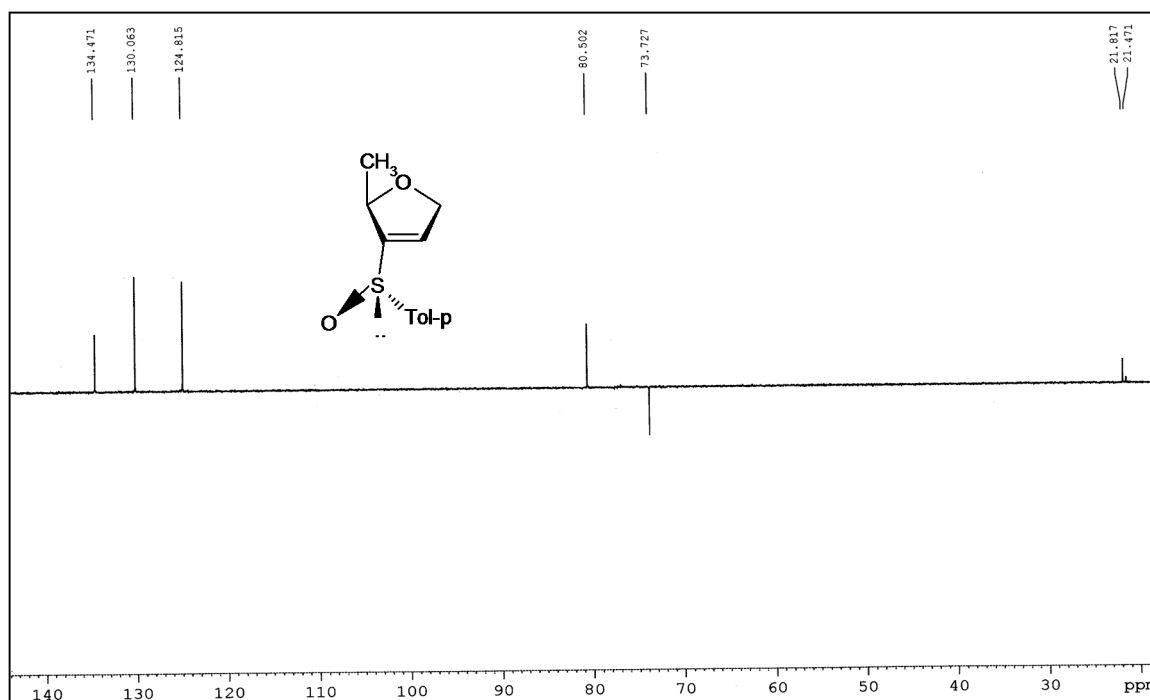
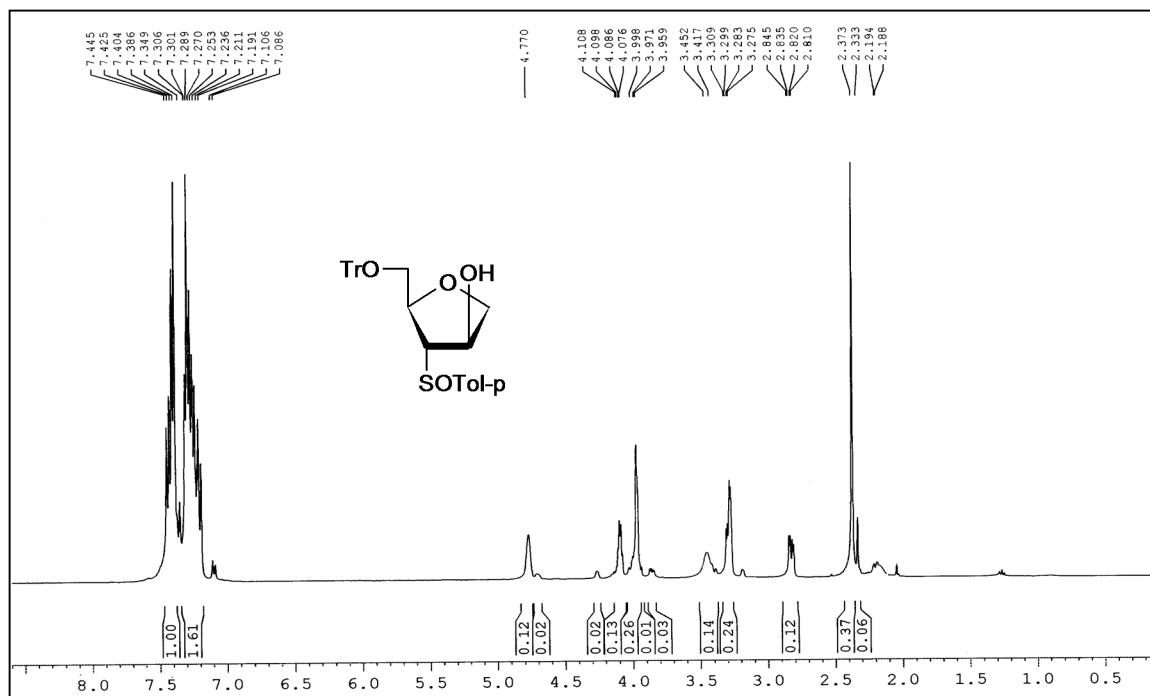


Figure S45. DEPT spectrum of compound 19Ss.

Figure S46. ¹H-NMR spectrum of compound 20.

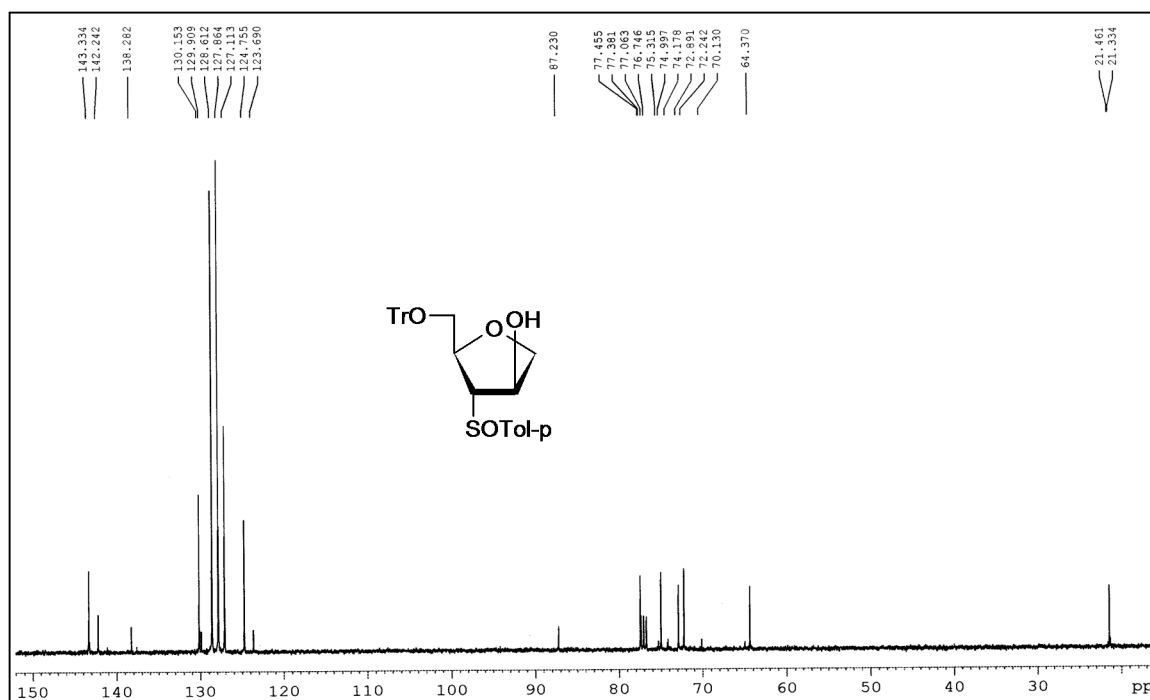
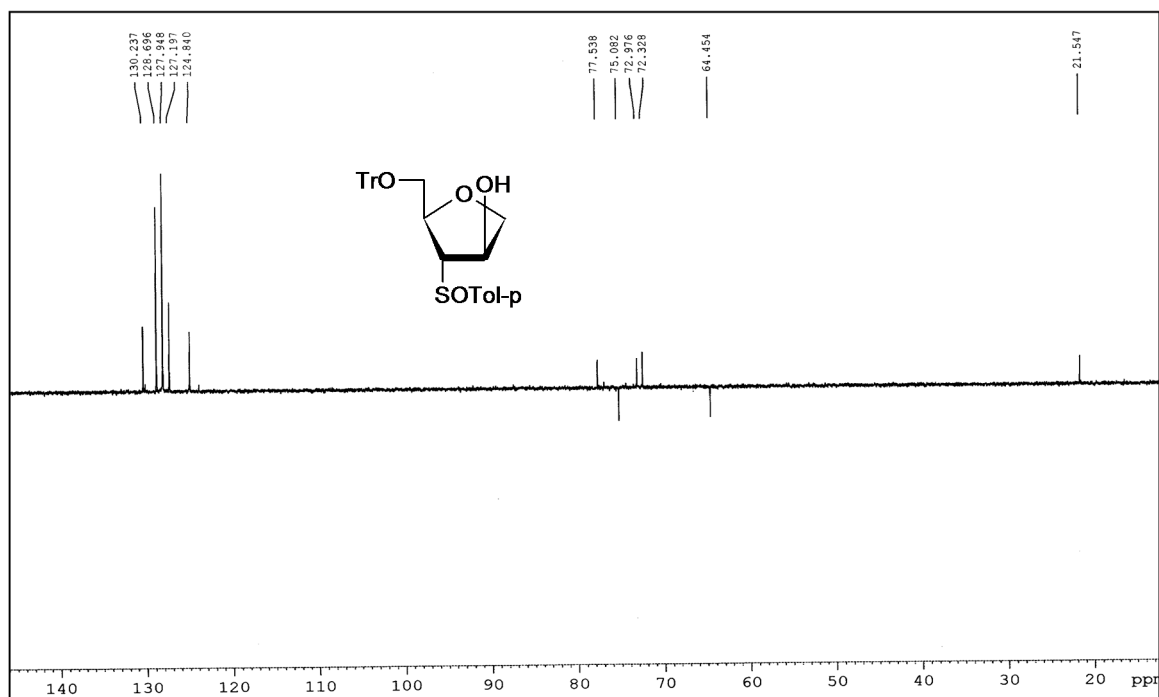
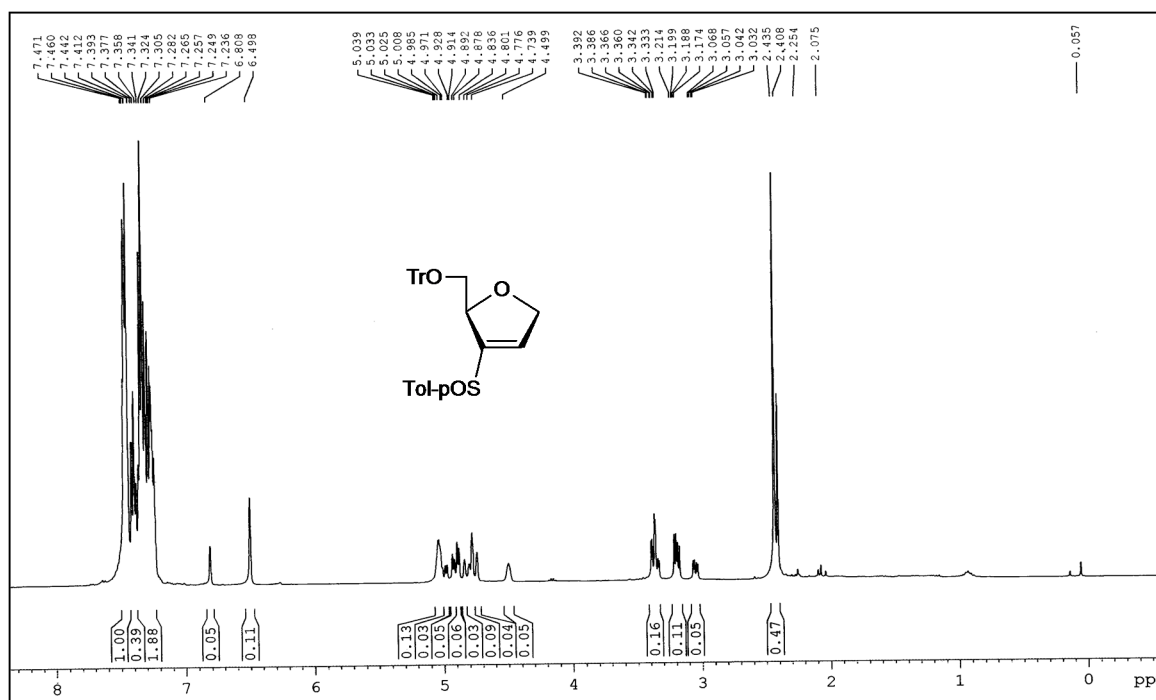
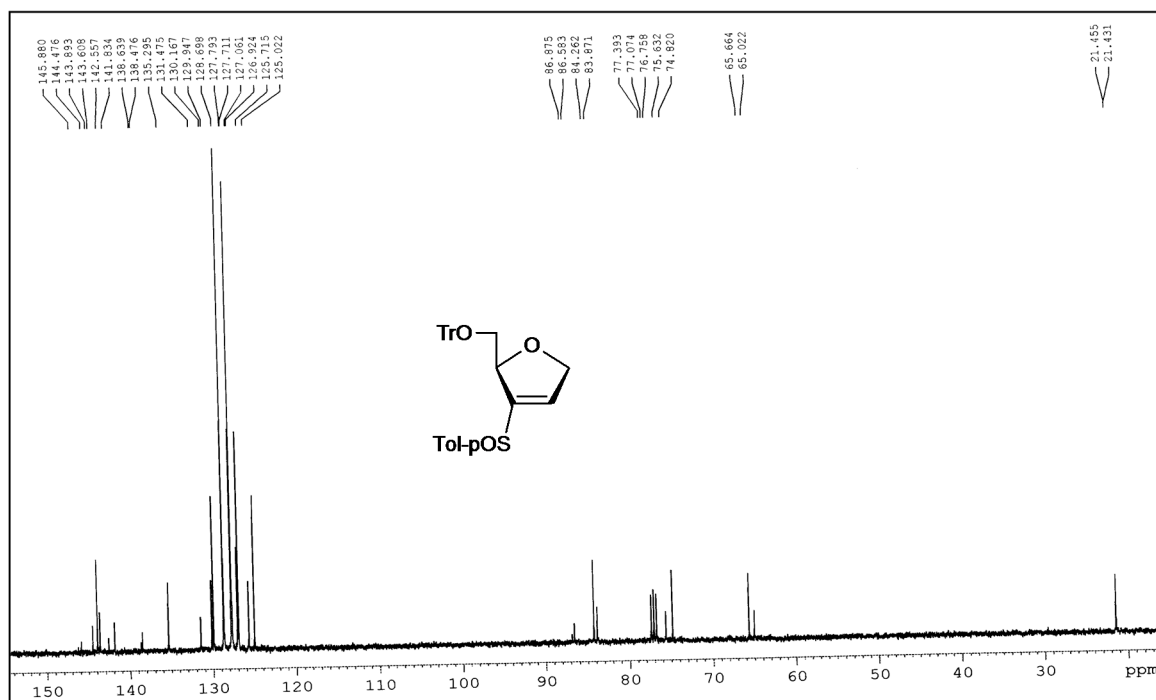
Figure S47. ¹³C-NMR spectrum of compound 20.

Figure S48. DEPT spectrum of compound 20.

Figure S49. ¹H-NMR spectrum of compound 21.Figure S50. ¹³C-NMR spectrum of compound 21.

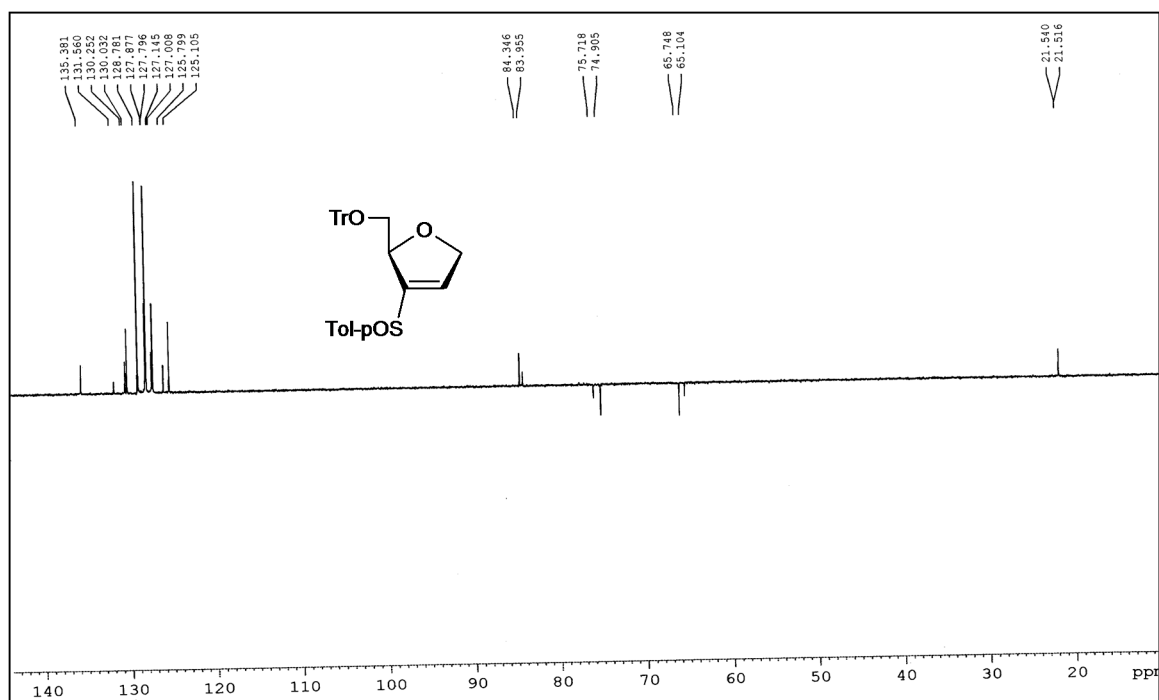
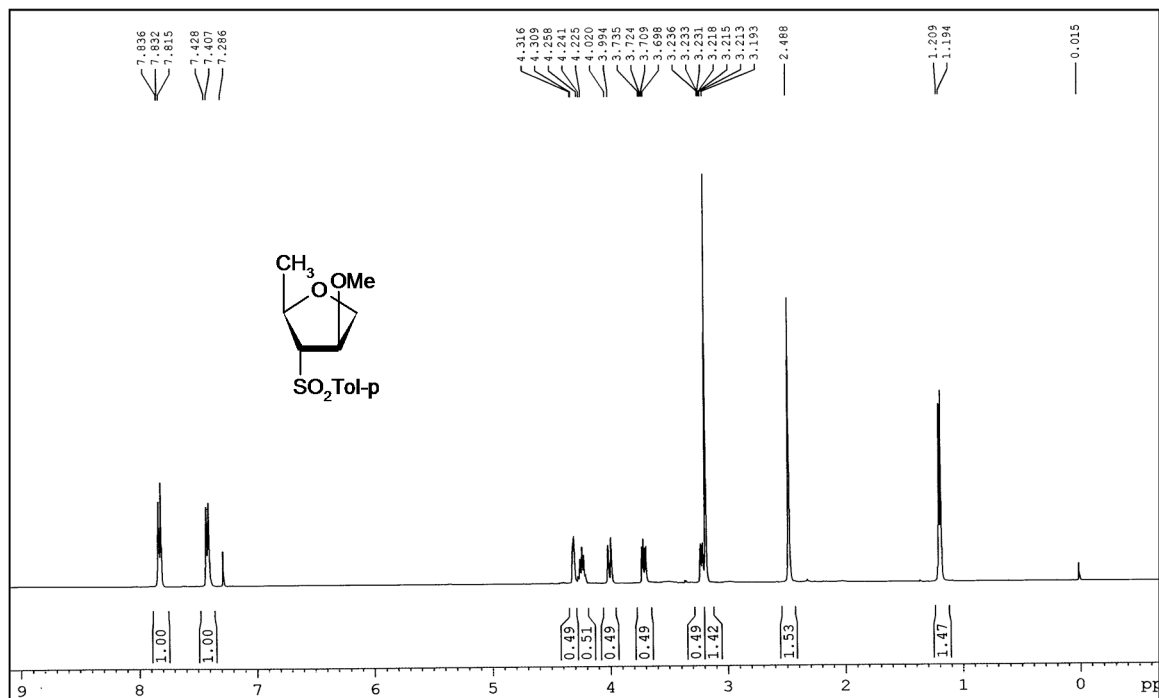


Figure S51. DEPT spectrum of compound 21.

Figure S52. ¹H-NMR spectrum of compound 22.

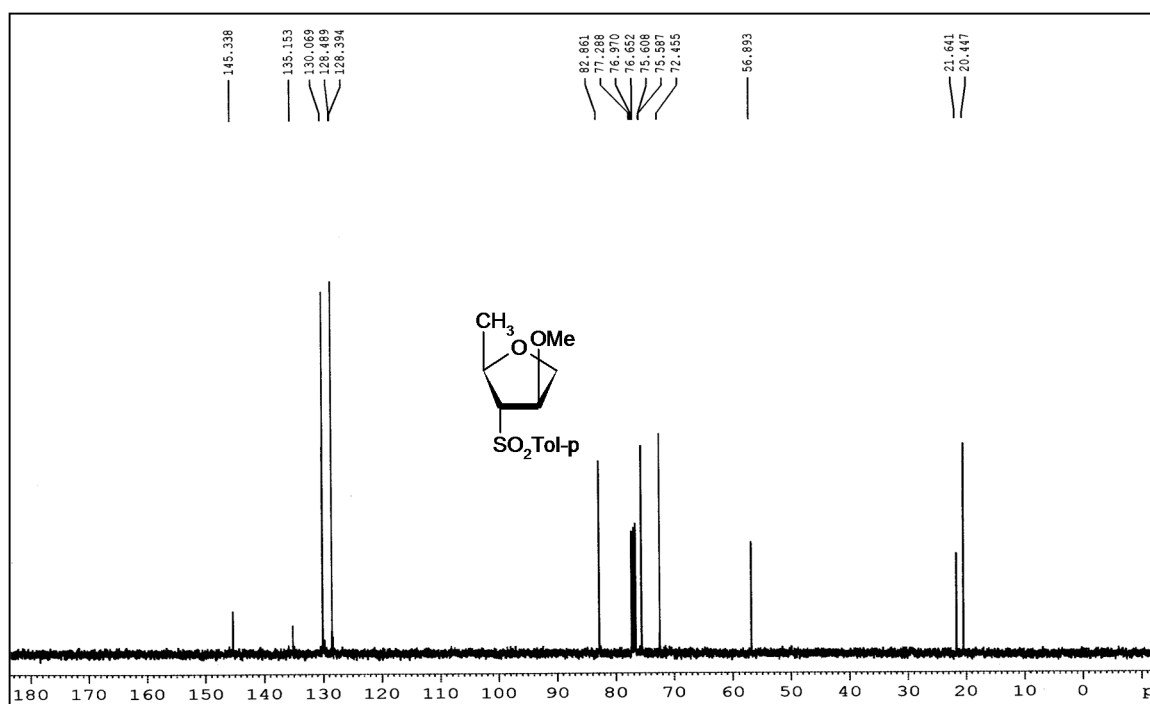
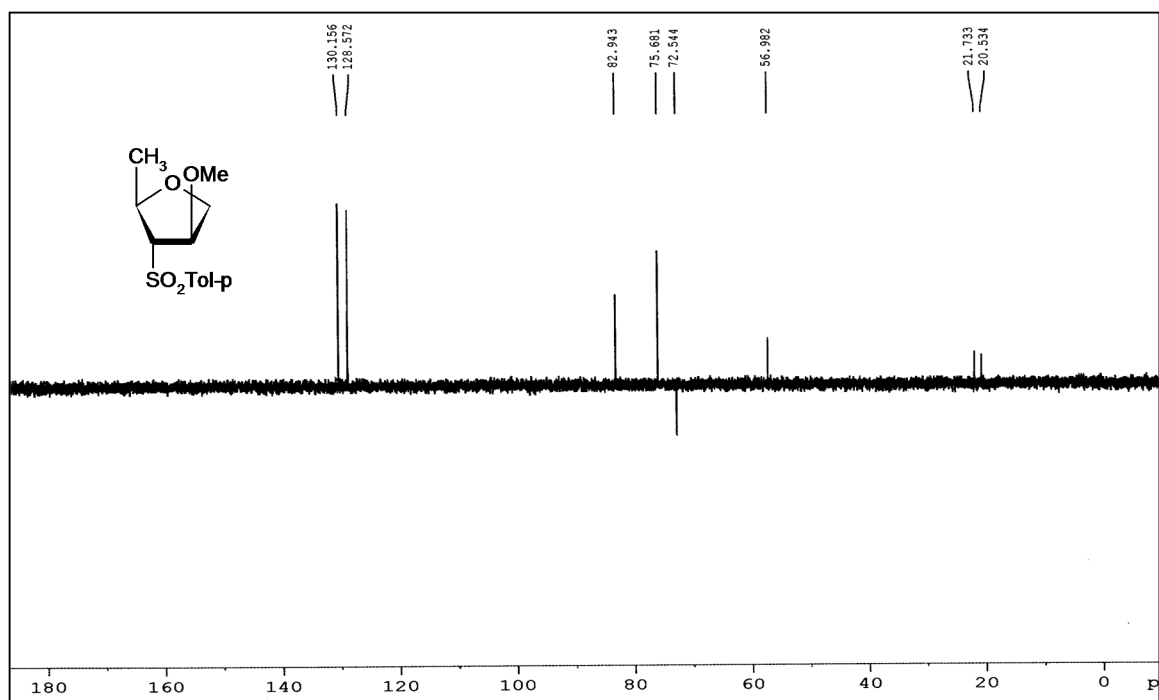
Figure S53. ¹³C-NMR spectrum of compound 22.

Figure S54. DEPT spectrum of compound 22.

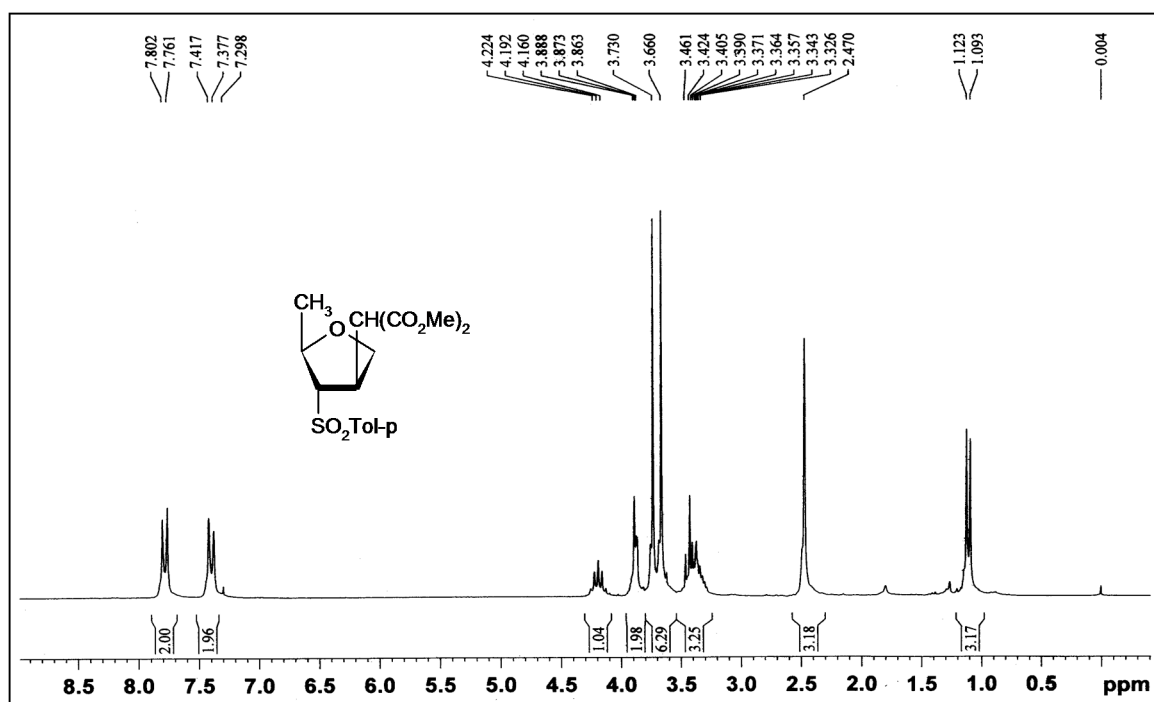


Figure S55. ^1H -NMR spectrum of compound **23**.

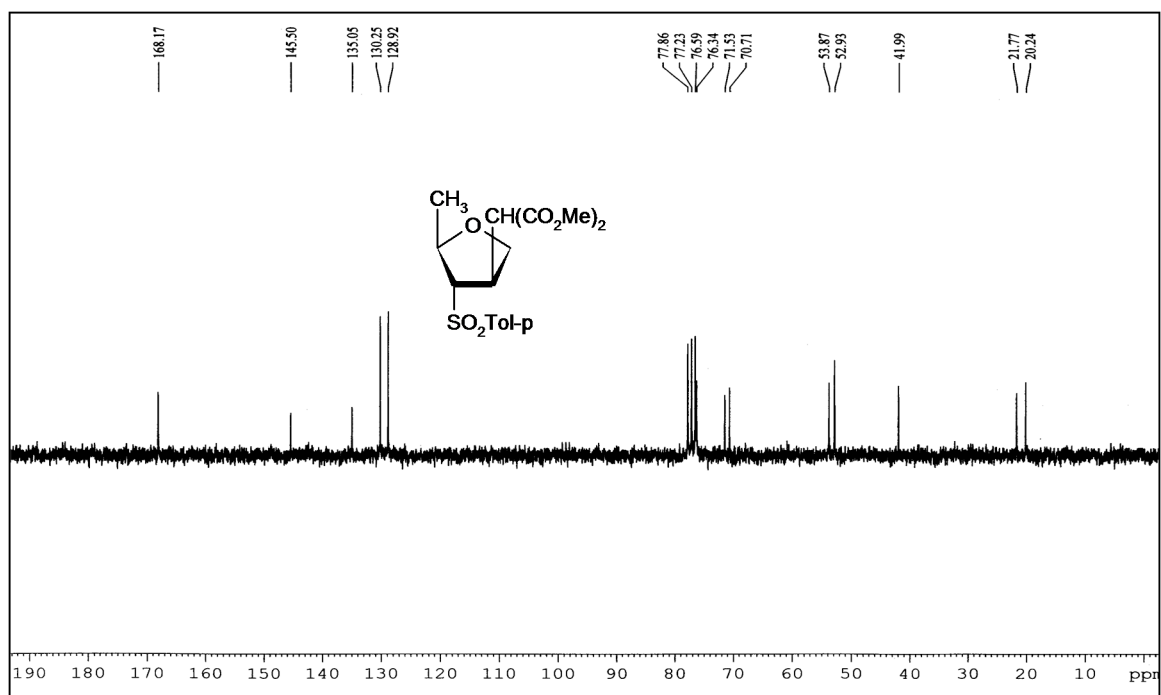


Figure S56. ^{13}C -NMR spectrum of compound **23**.

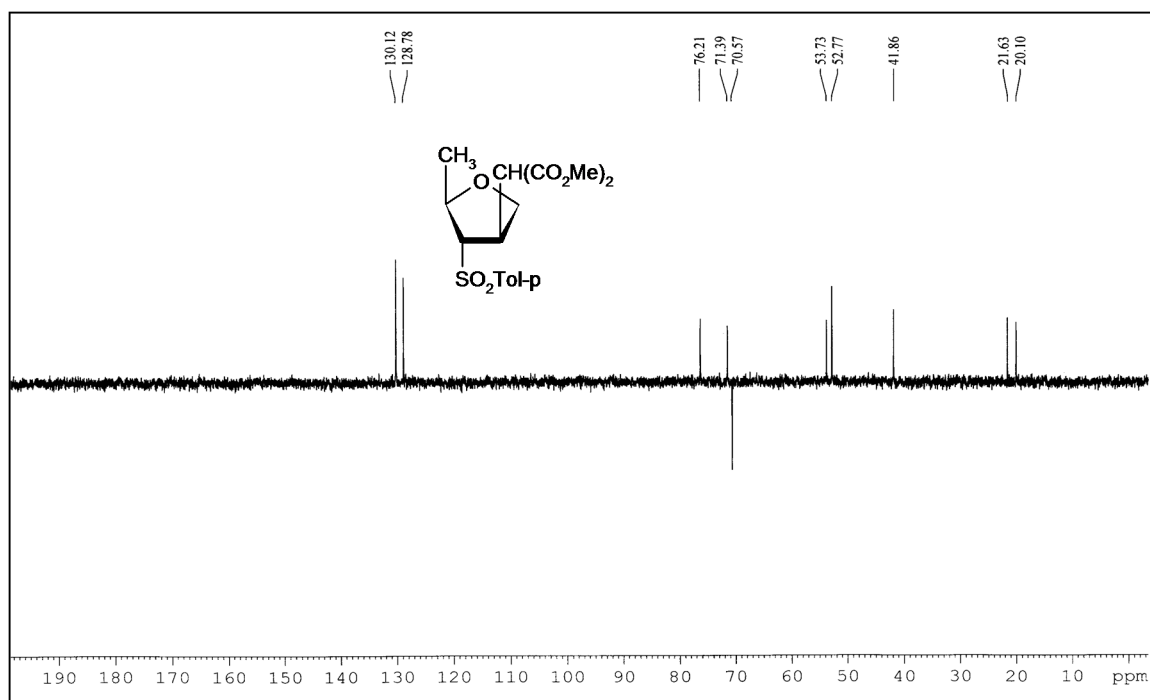
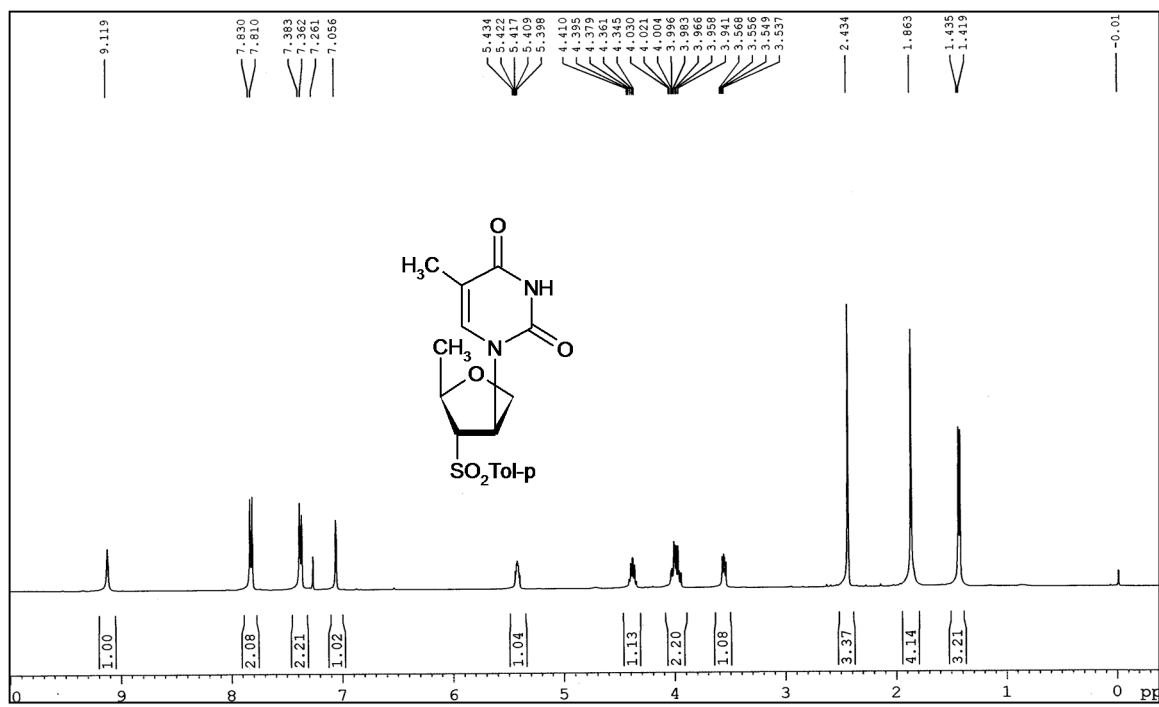


Figure S57. DEPT spectrum of compound 23.

Figure S58. ^1H -NMR spectrum of compound 24.

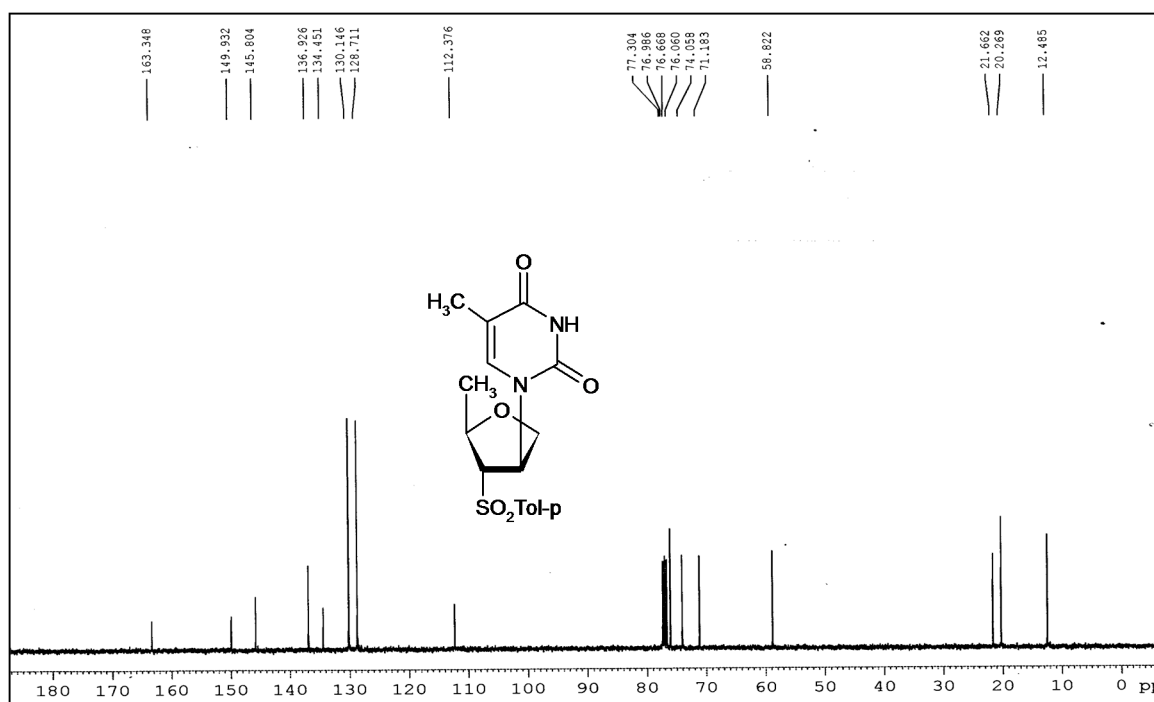
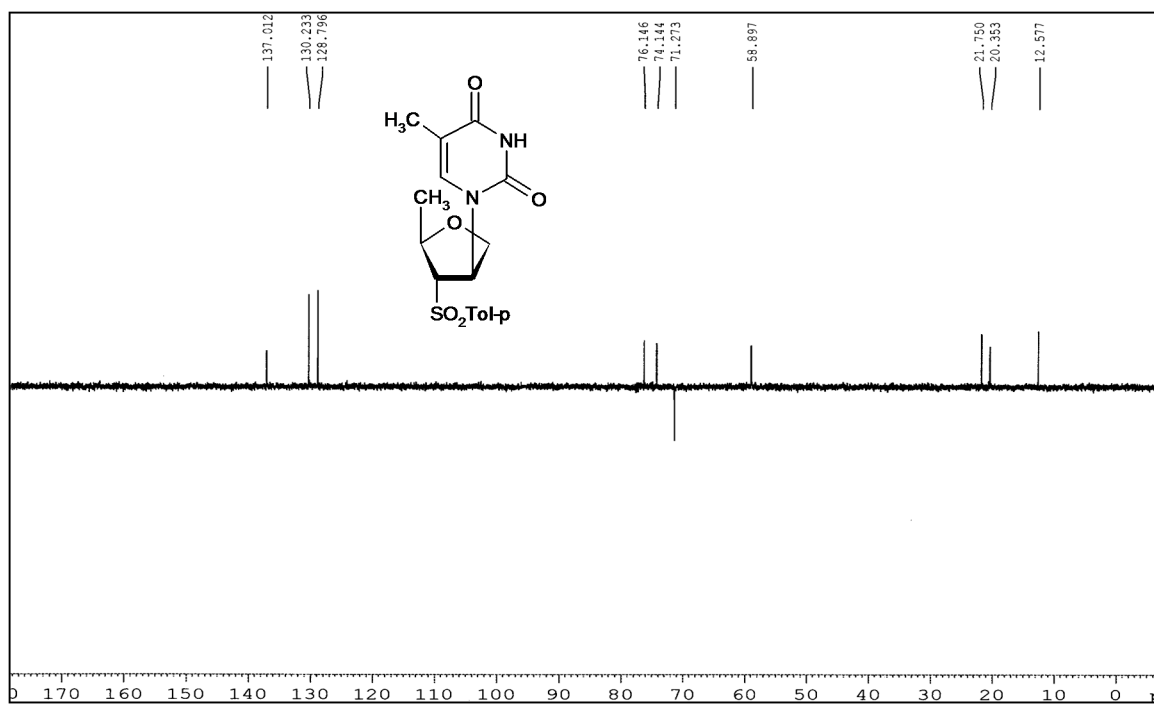
Figure S59. ¹³C-NMR spectrum of compound 24.

Figure S60. DEPT spectrum of compound 24.

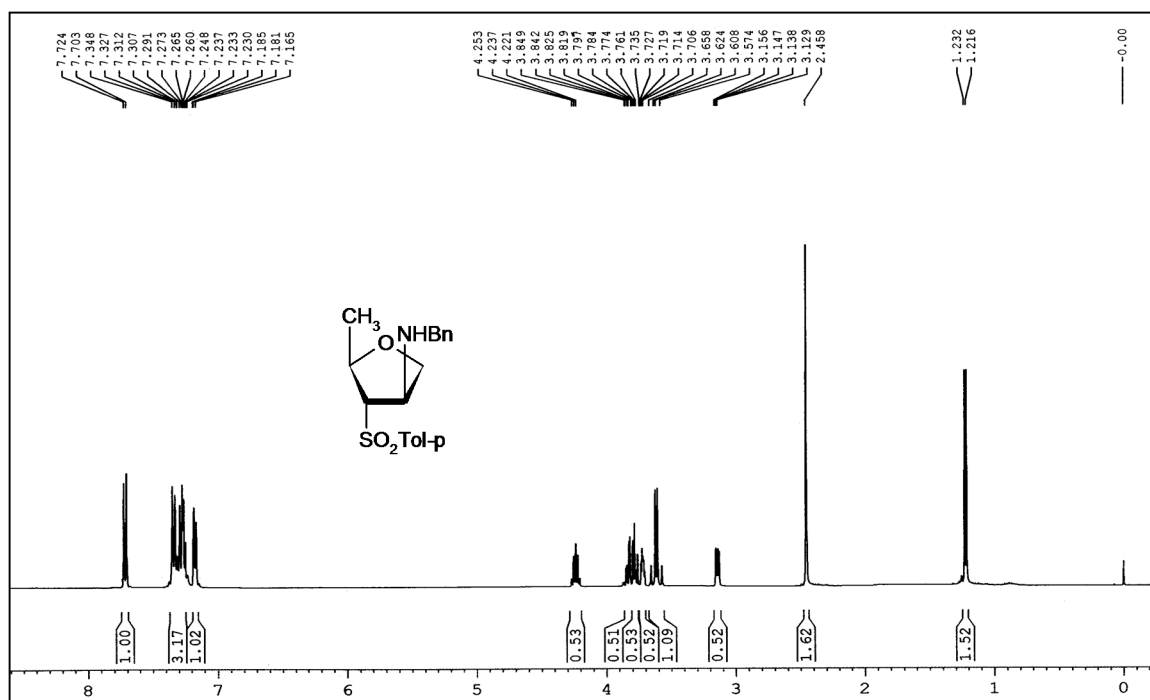


Figure S61. ^1H -NMR spectrum of compound **25**.

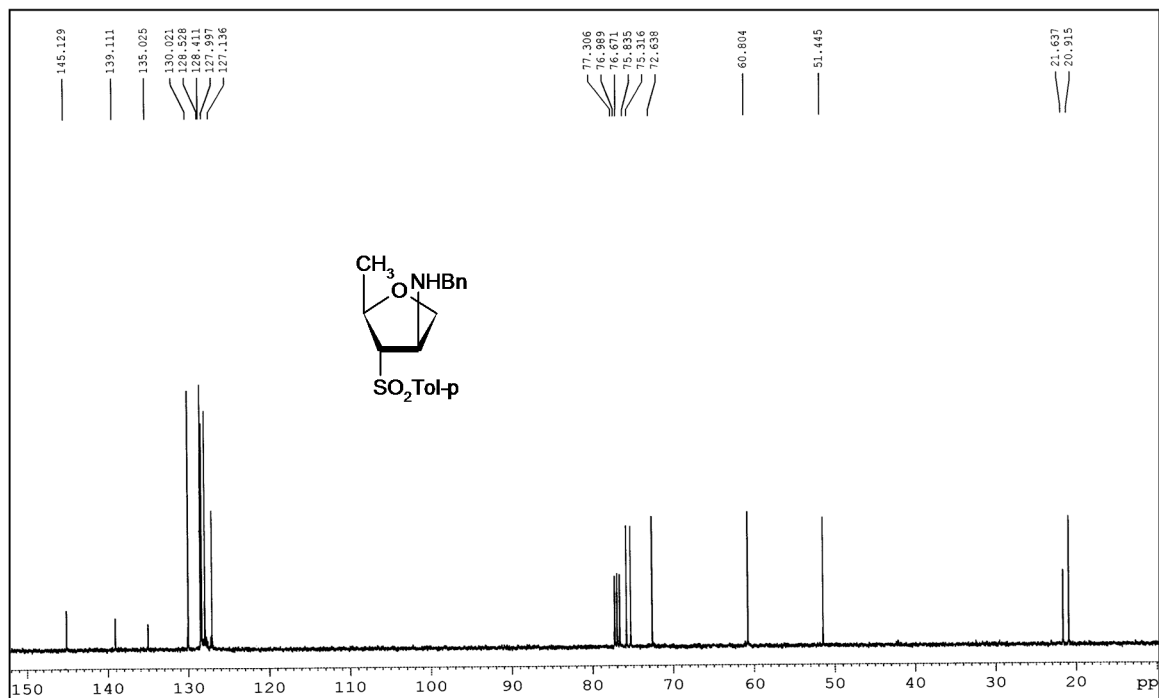


Figure S62. ^{13}C -NMR spectrum of compound **25**.

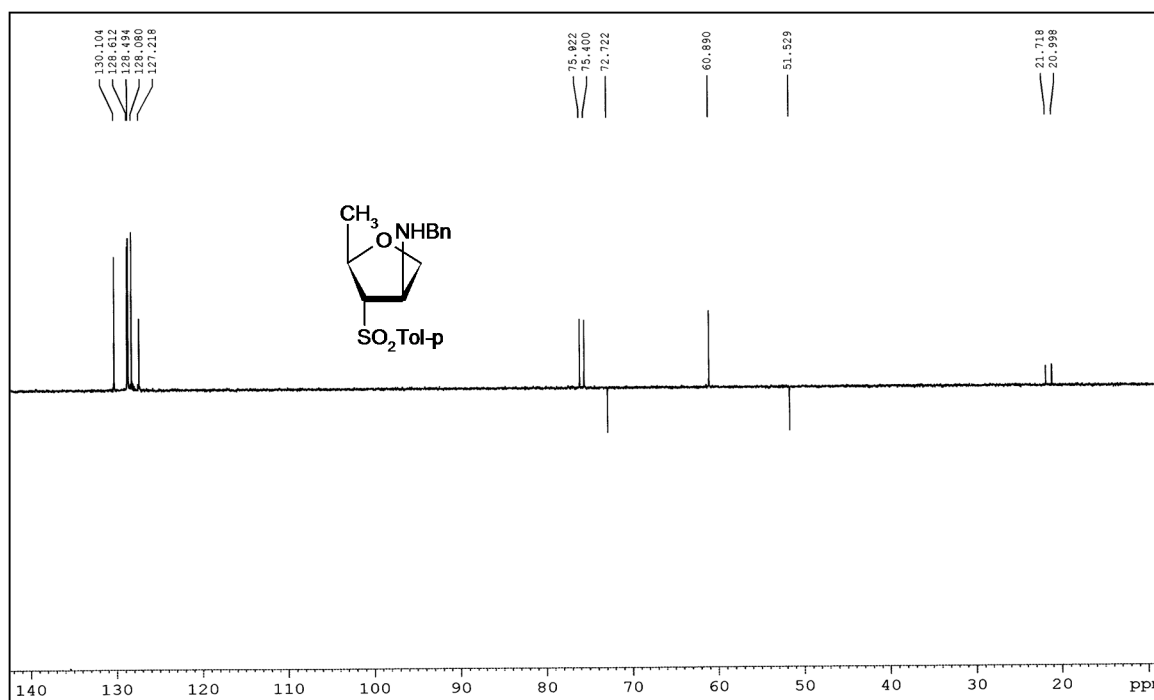
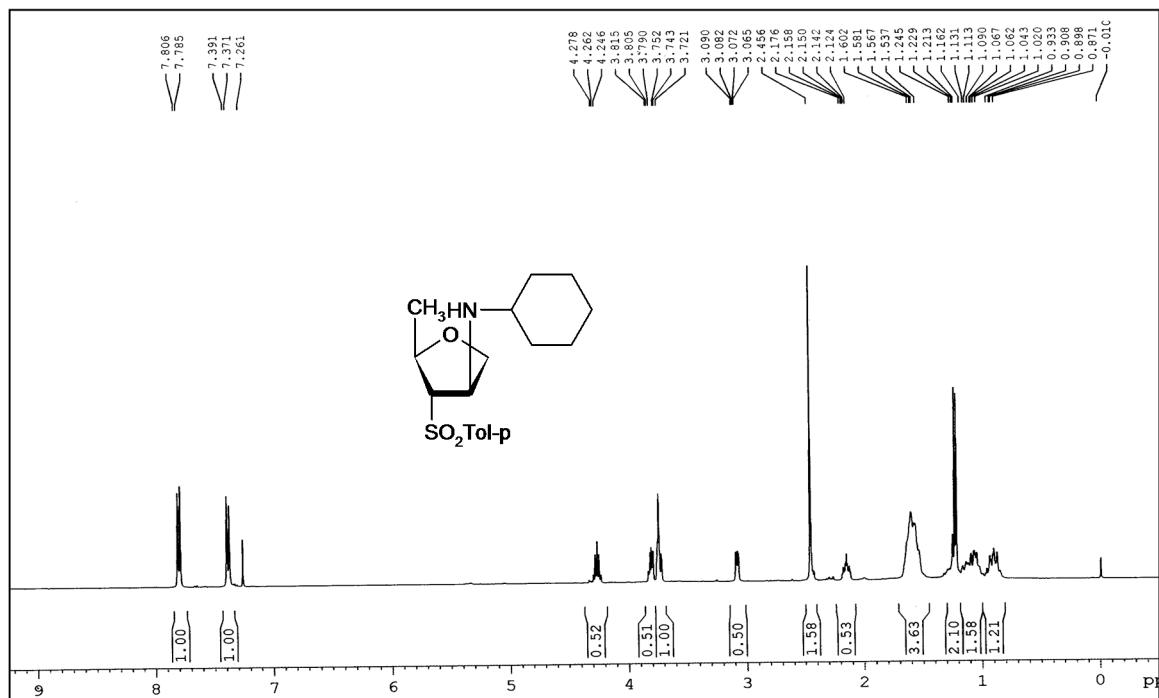


Figure S63. DEPT spectrum of compound 25.

Figure S64. ¹H-NMR spectrum of compound 26.

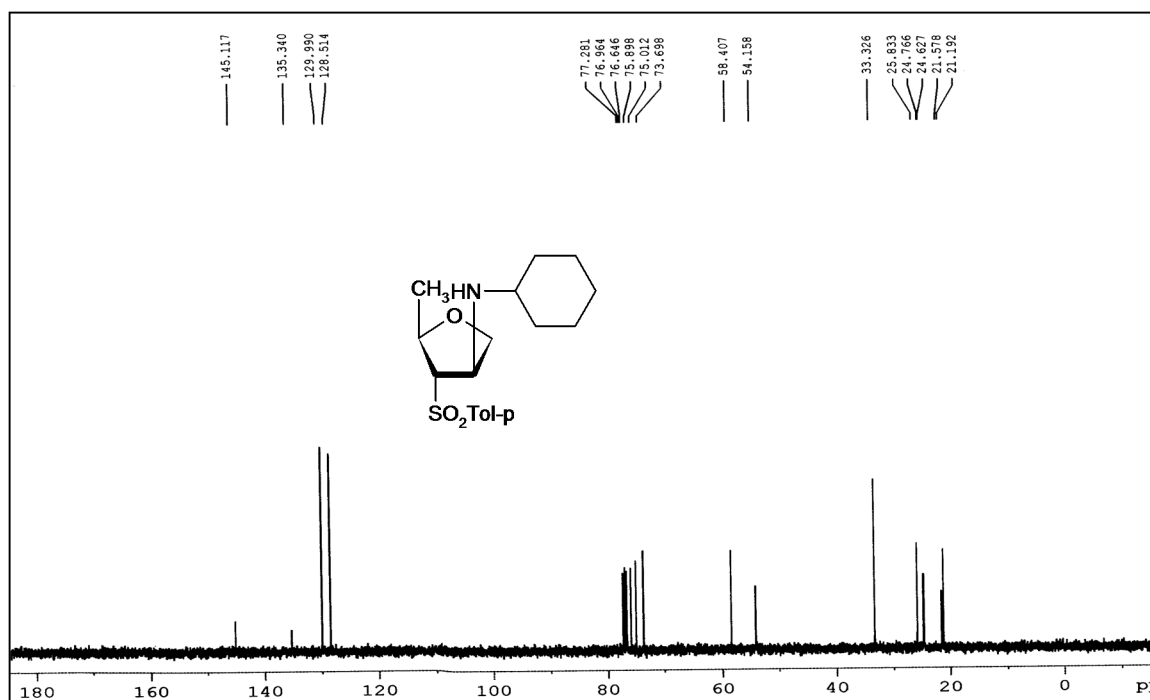
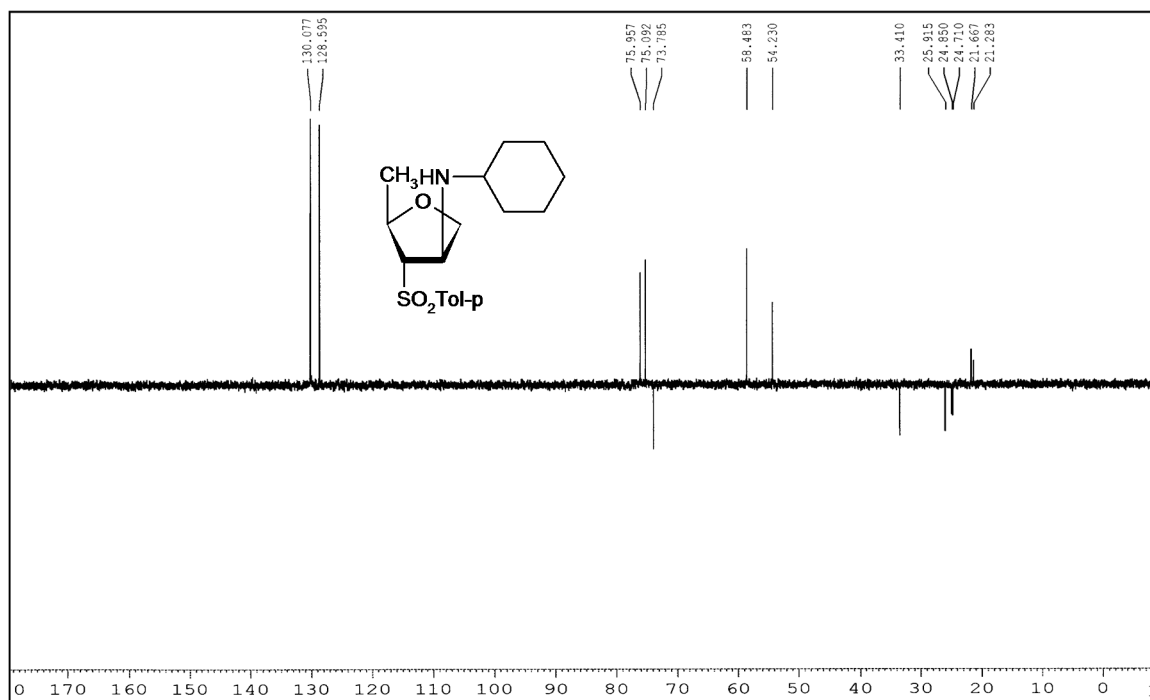
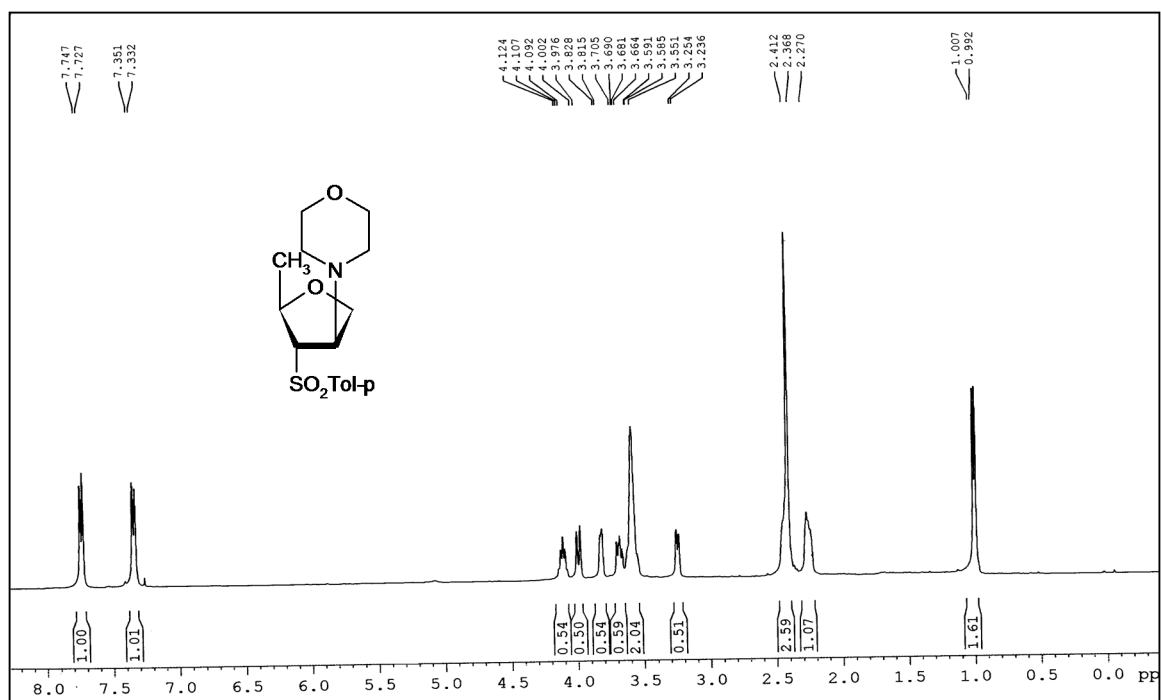
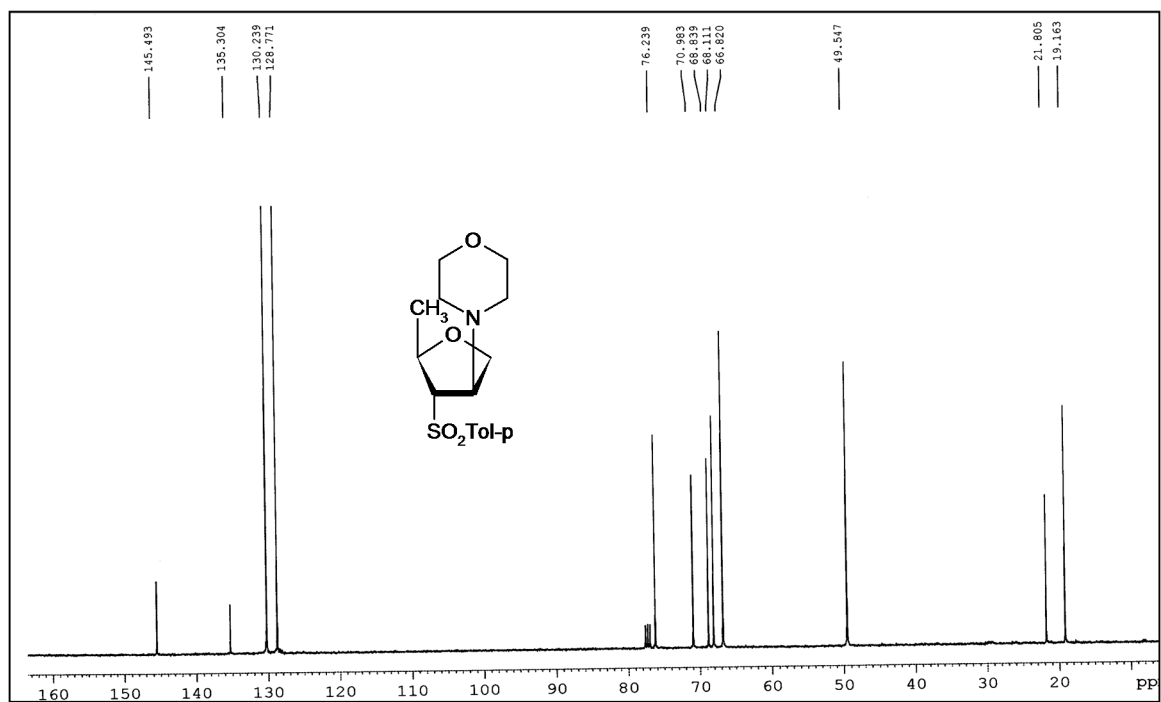
Figure S65. ¹³C-NMR spectrum of compound 26.

Figure S66. DEPT spectrum of compound 26.

Figure S67. ¹H-NMR spectrum of compound 27.Figure S68. ¹³C-NMR spectrum of compound 27.

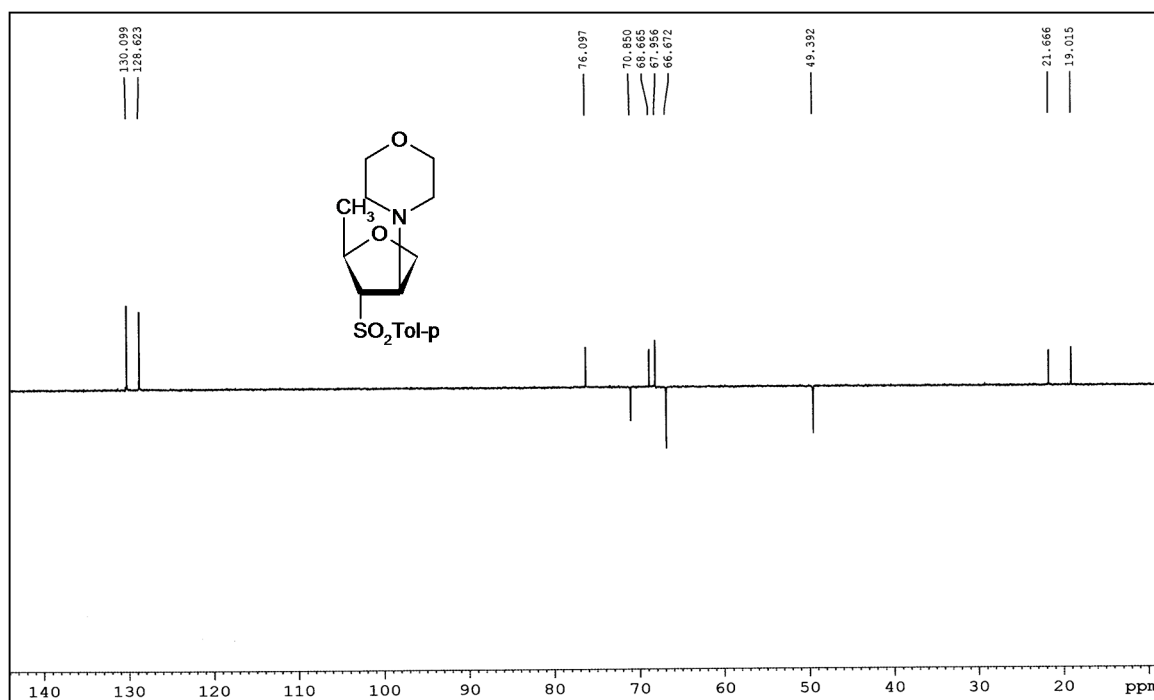
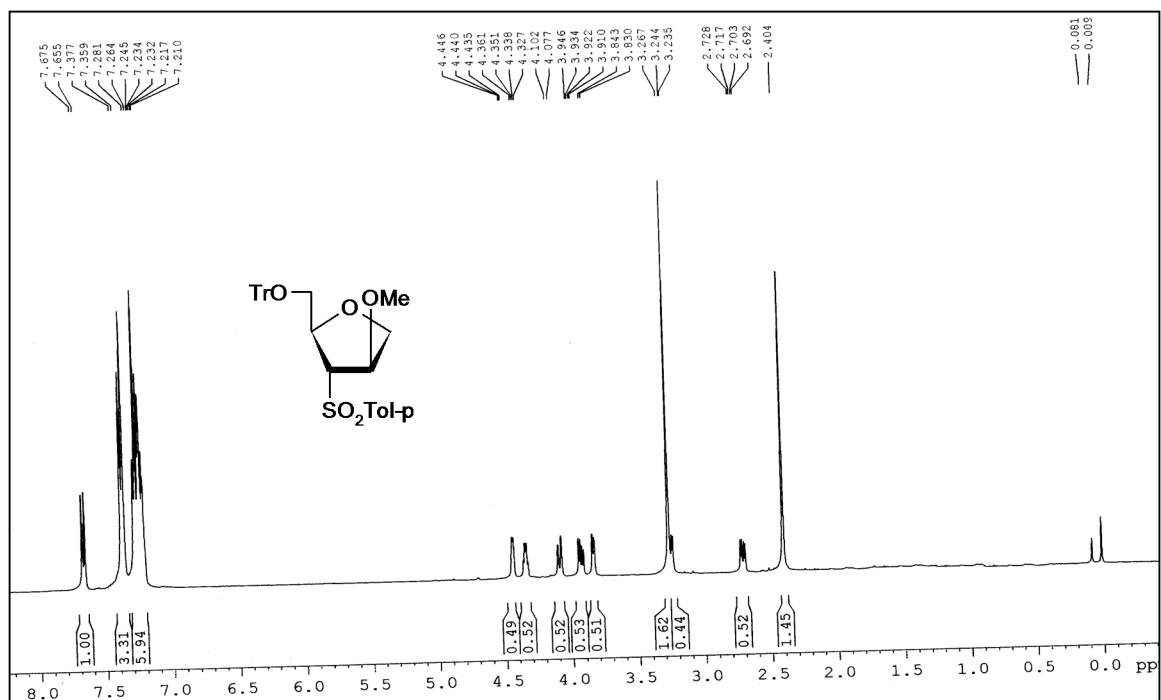


Figure S69. DEPT spectrum of compound 27.

Figure S70. ¹H-NMR spectrum of compound 28.

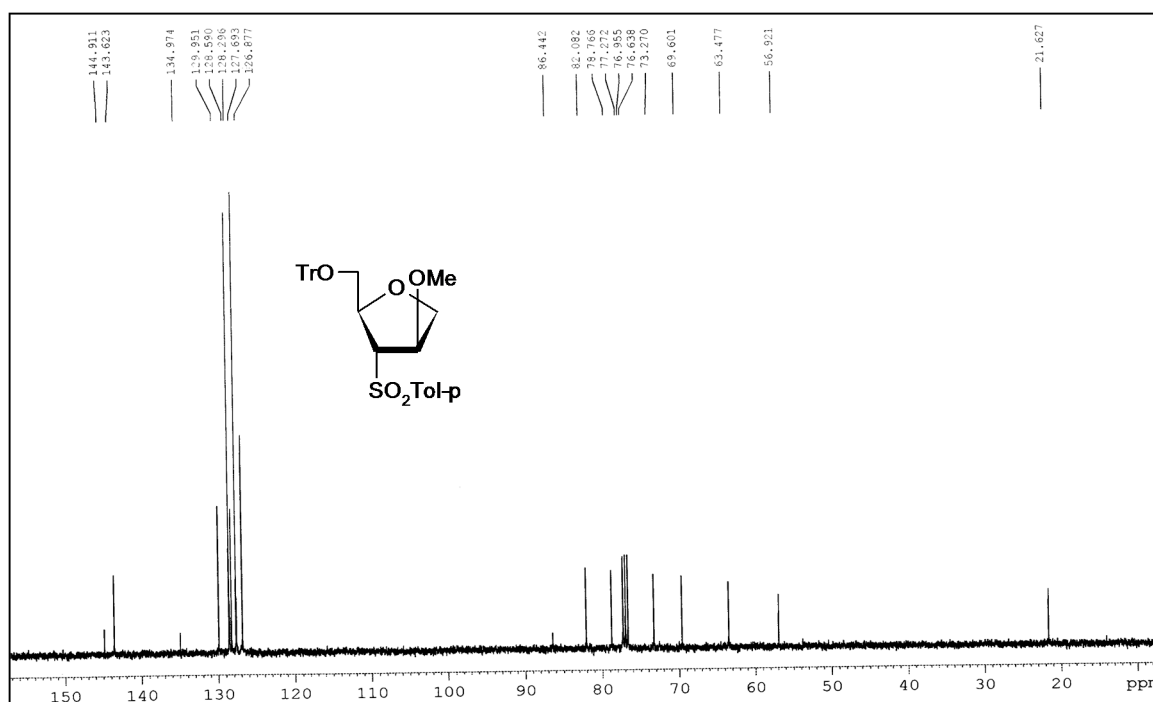
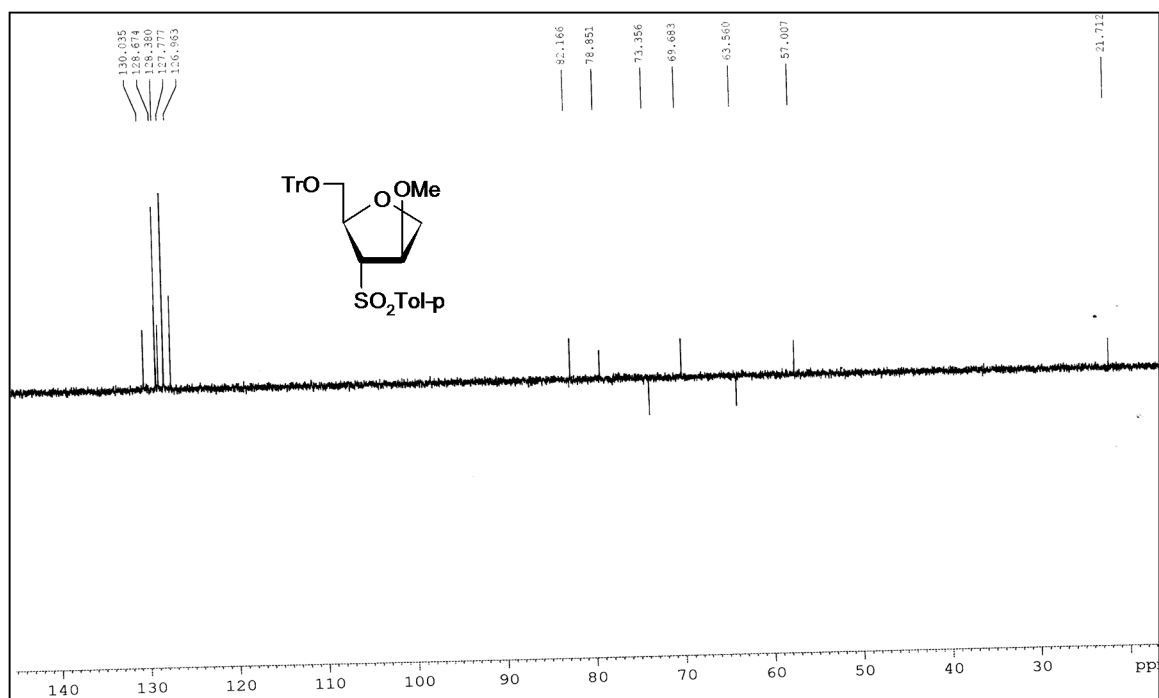
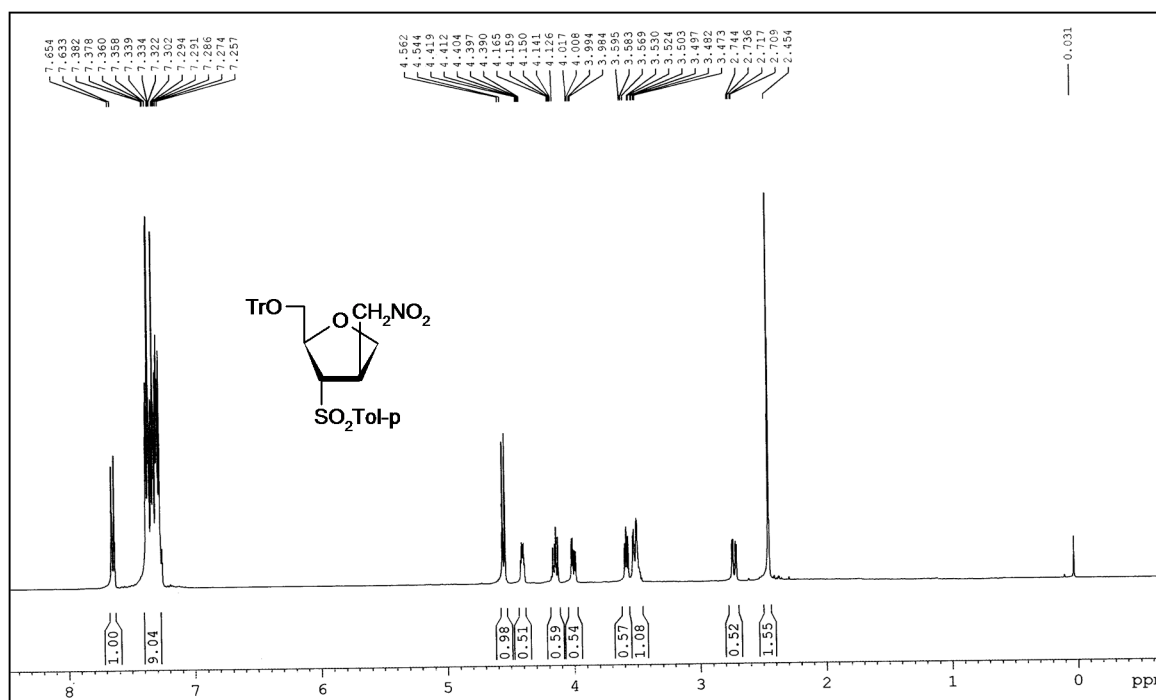
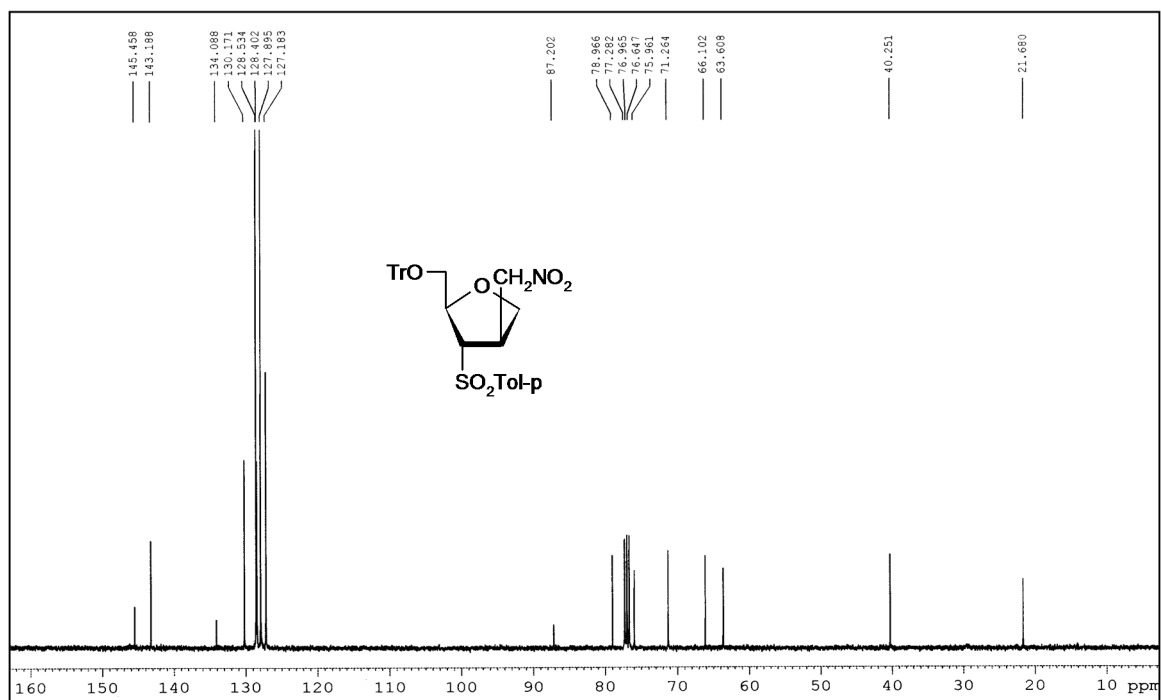
Figure S71. ¹³C-NMR spectrum of compound 28.

Figure S72. DEPT spectrum of compound 28.

Figure S73. ¹H-NMR spectrum of compound 29.Figure S74. ¹³C-NMR spectrum of compound 29.

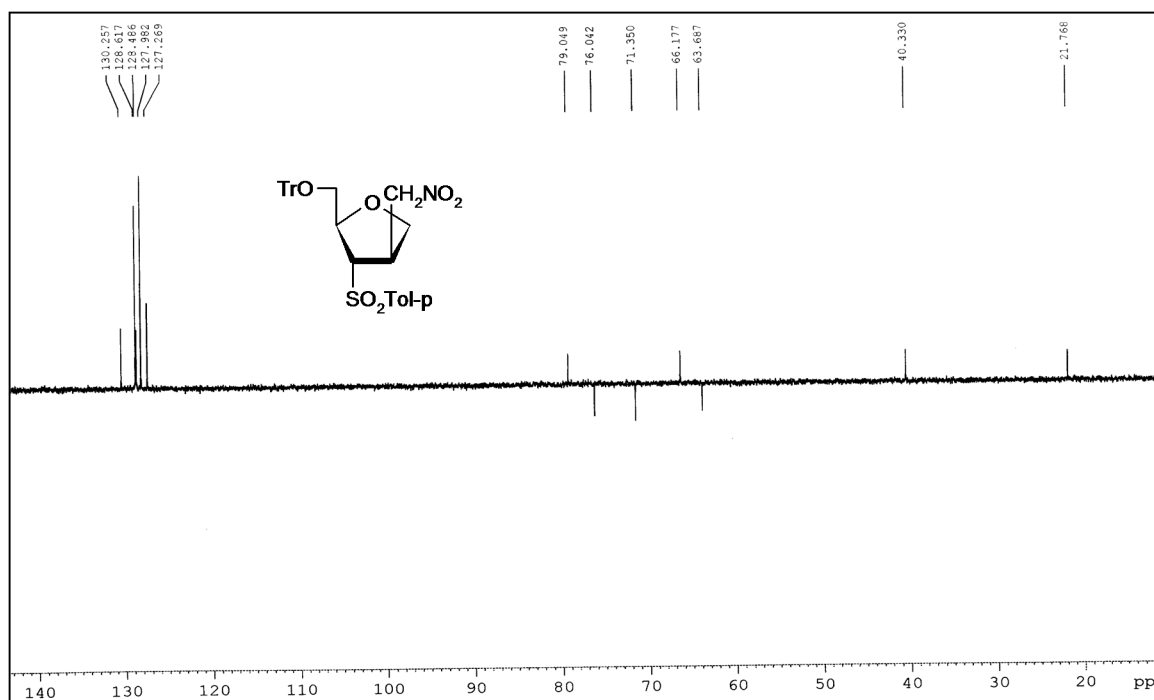
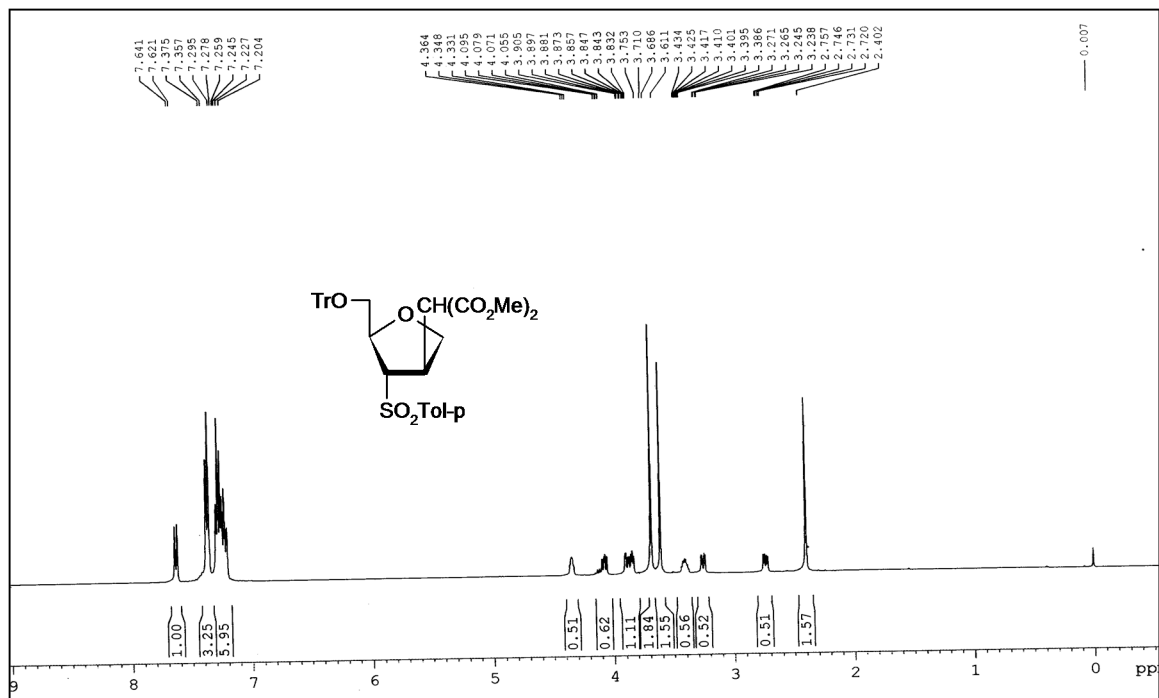


Figure S75. DEPT spectrum of compound 29.

Figure S76. ^1H -NMR spectrum of compound 30.

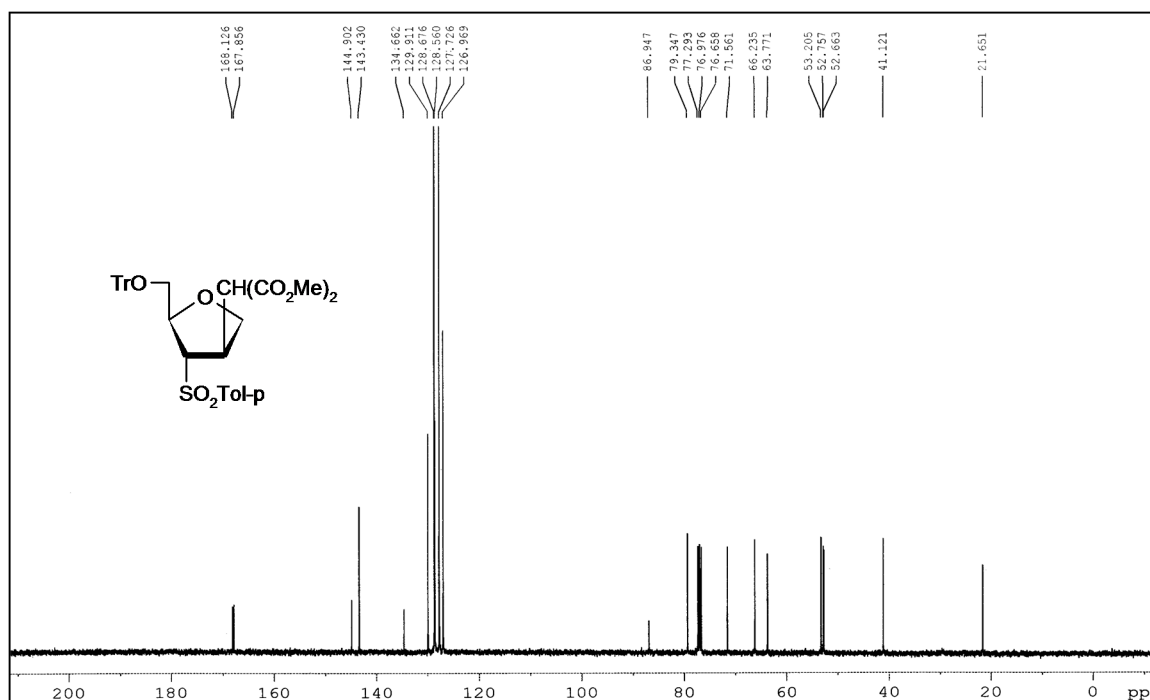
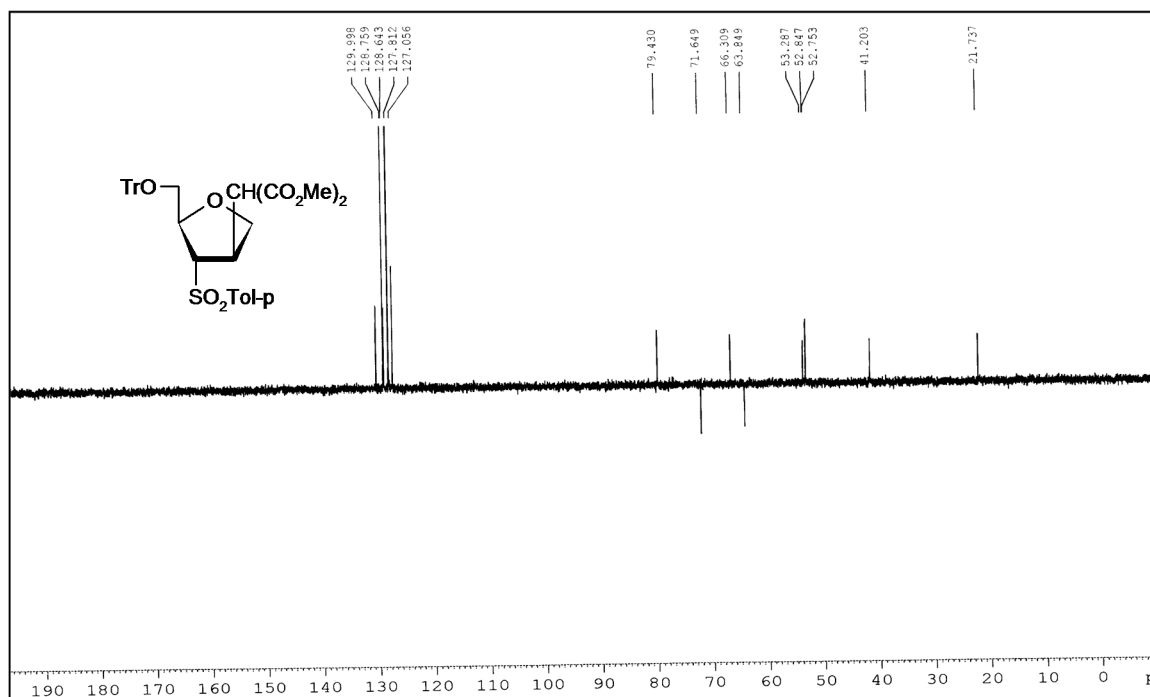
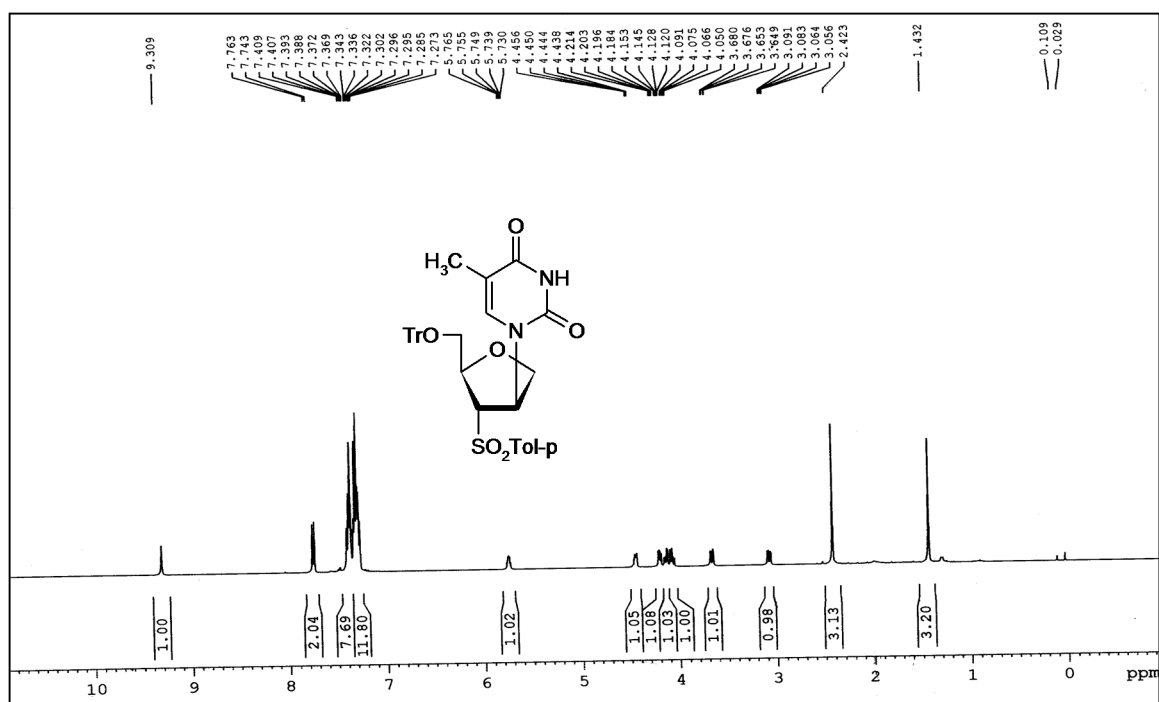
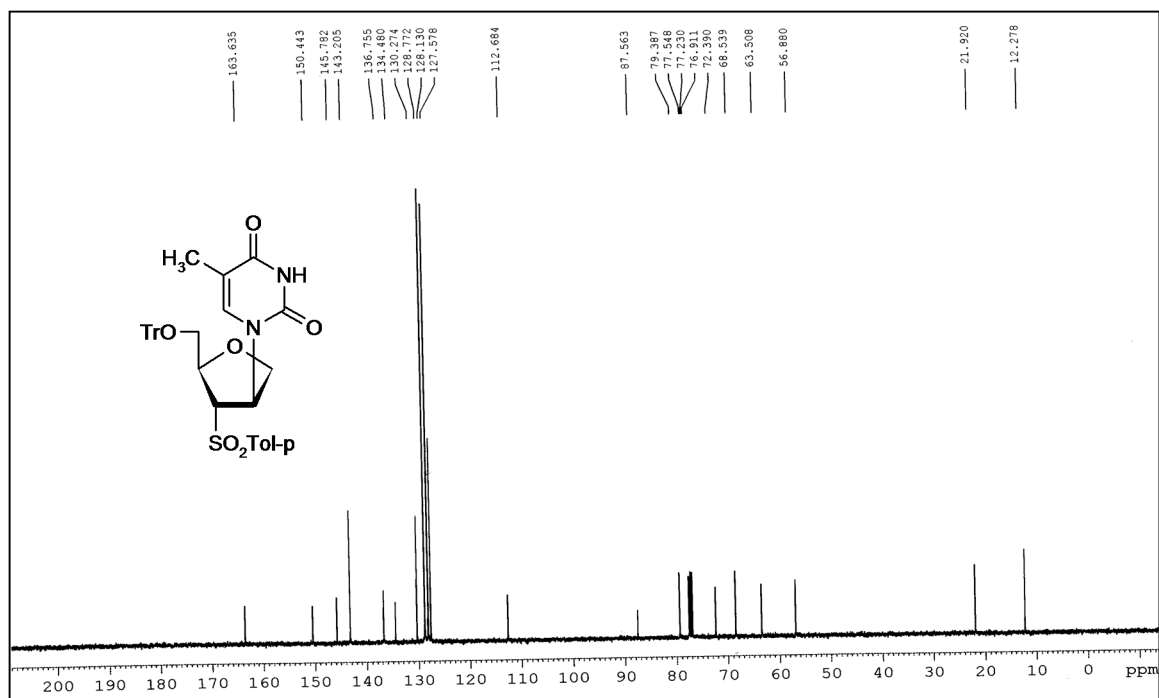
Figure S77. ¹³C-NMR spectrum of compound 30.

Figure S78. DEPT spectrum of compound 30.

Figure S79. ¹H-NMR spectrum of compound 31.Figure S80. ¹³C-NMR spectrum of compound 31.

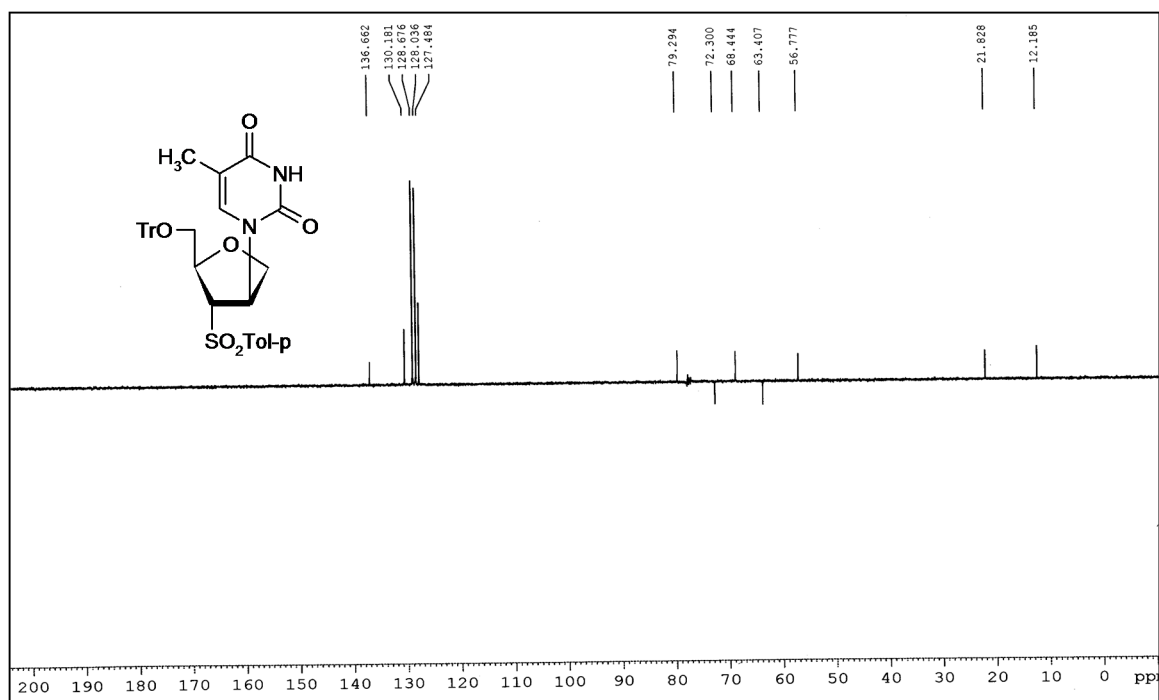
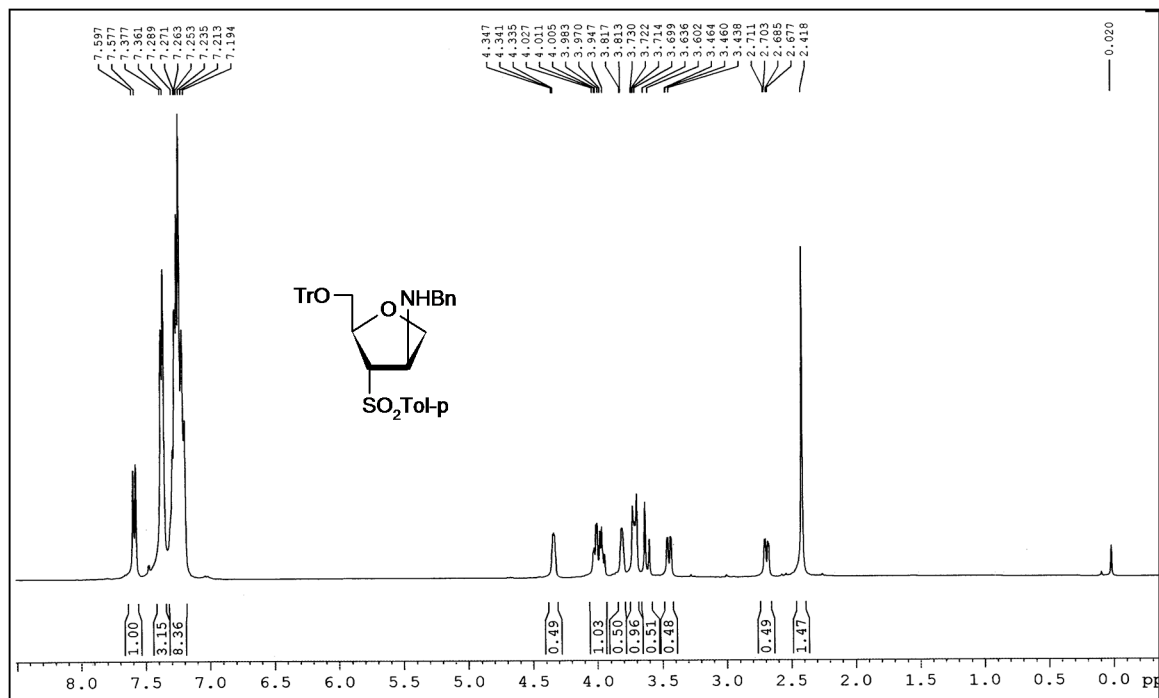


Figure S81. DEPT spectrum of compound 31.

Figure S82. ¹H-NMR spectrum of compound 32.

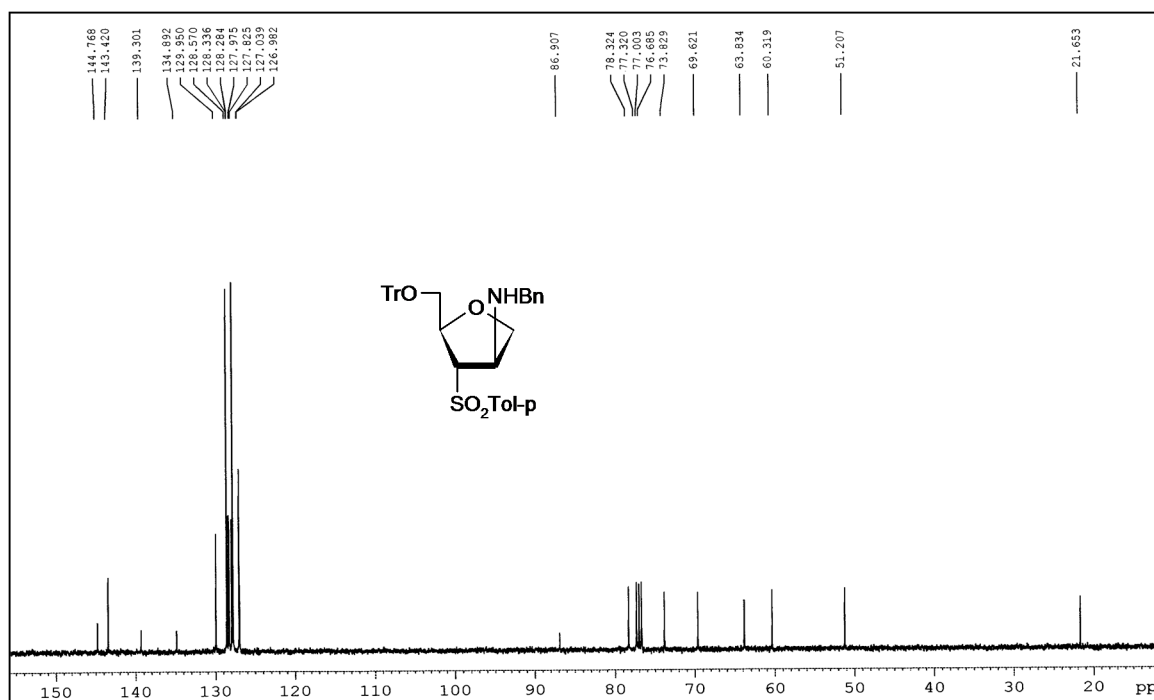
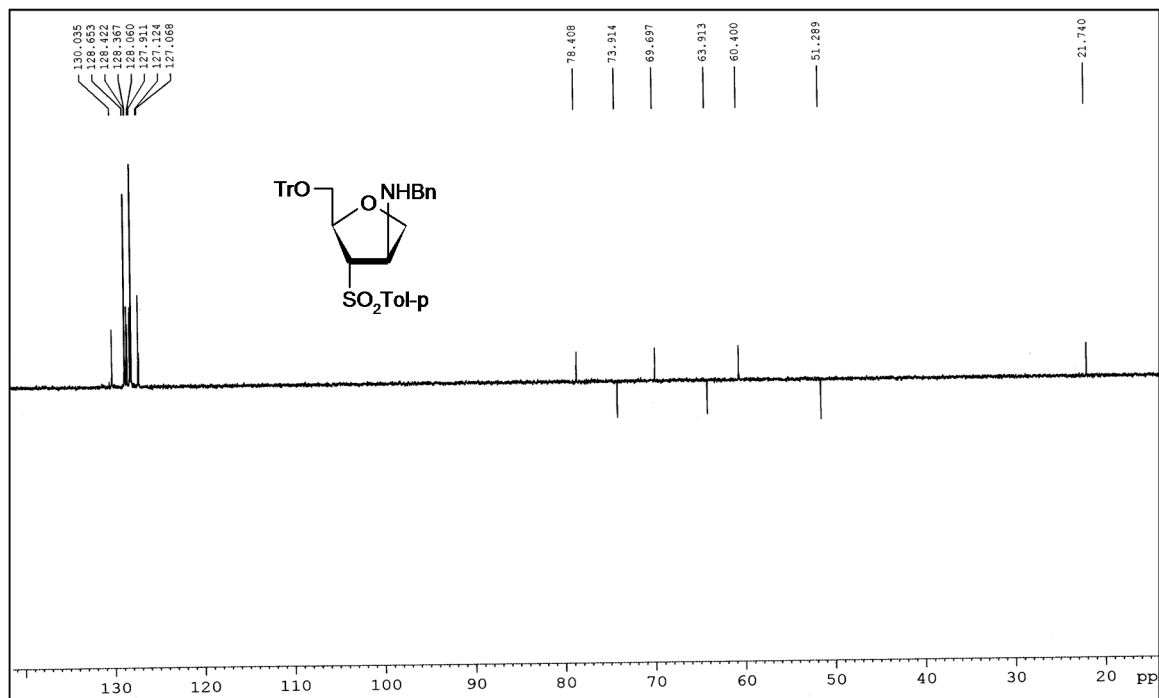
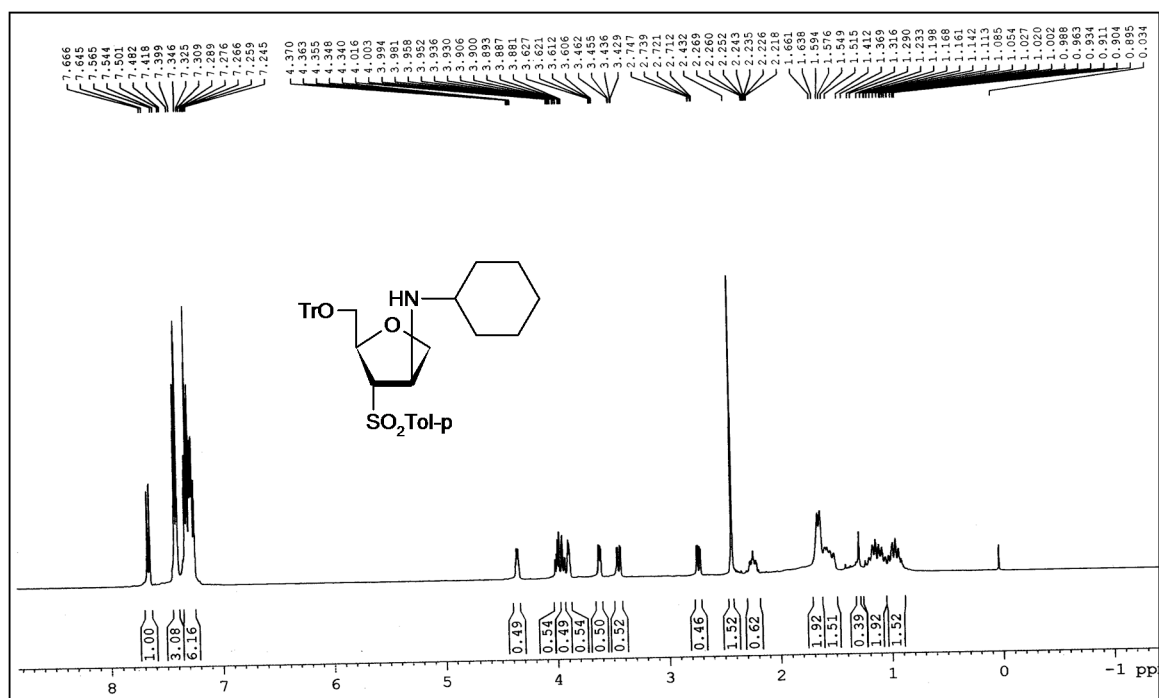
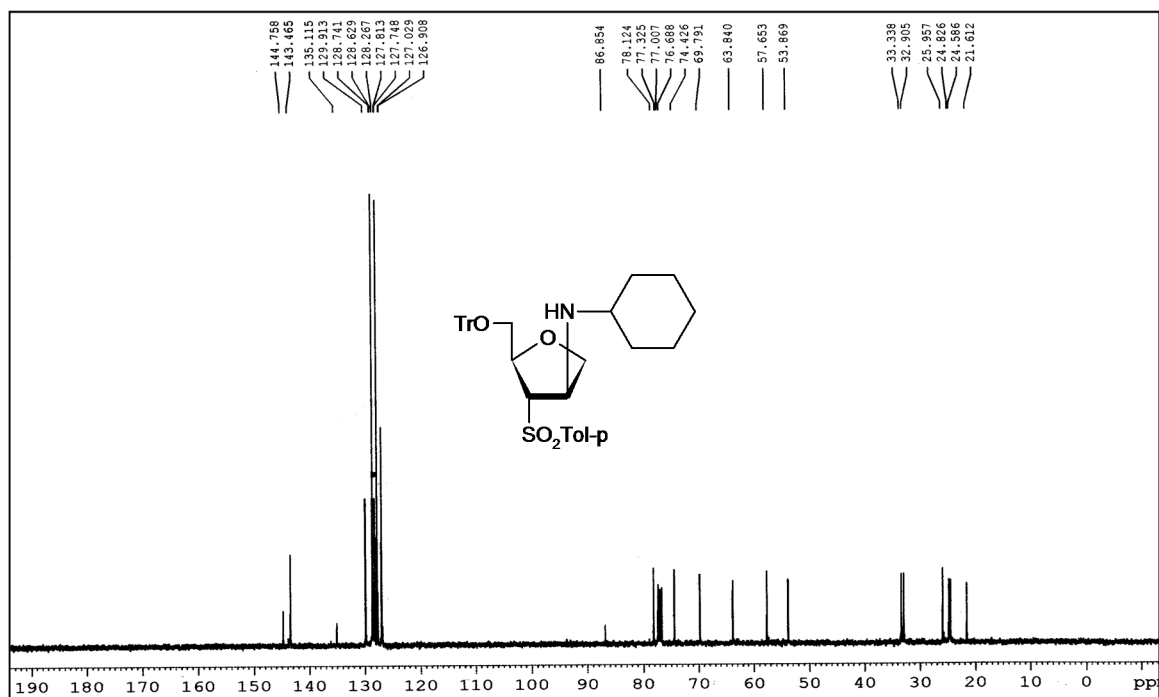
Figure S83. ¹³C-NMR spectrum of compound 32.

Figure S84. DEPT spectrum of compound 32.

Figure S85. ¹H-NMR spectrum of compound 33.Figure S86. ¹³C-NMR spectrum of compound 33.

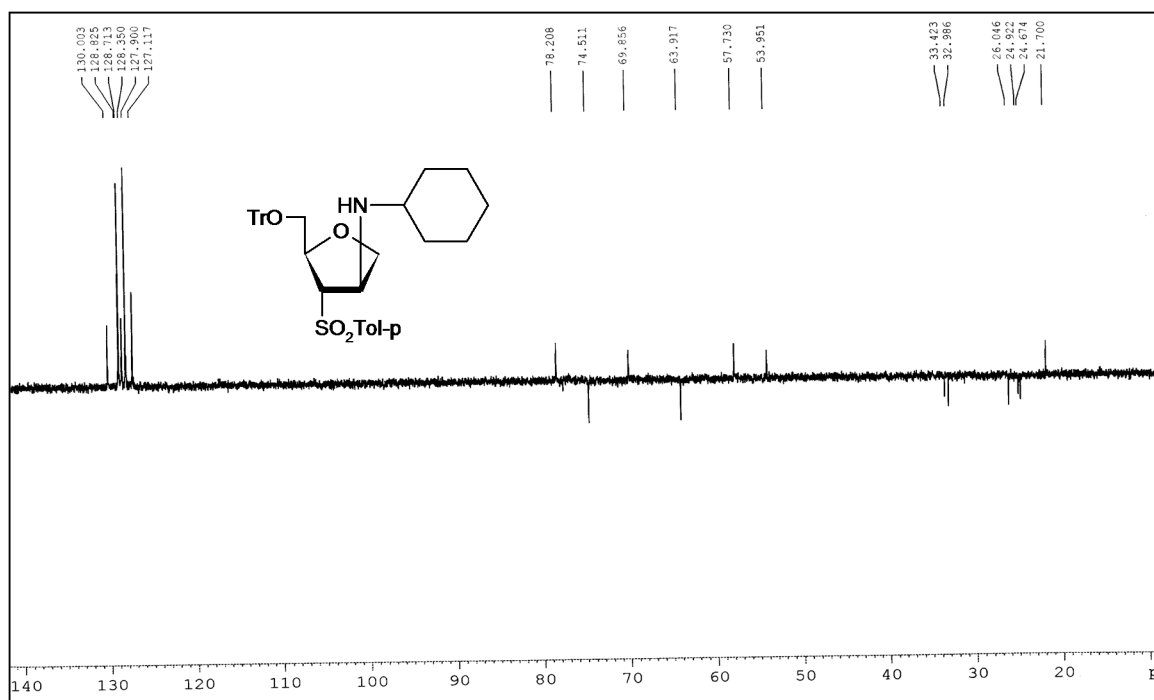
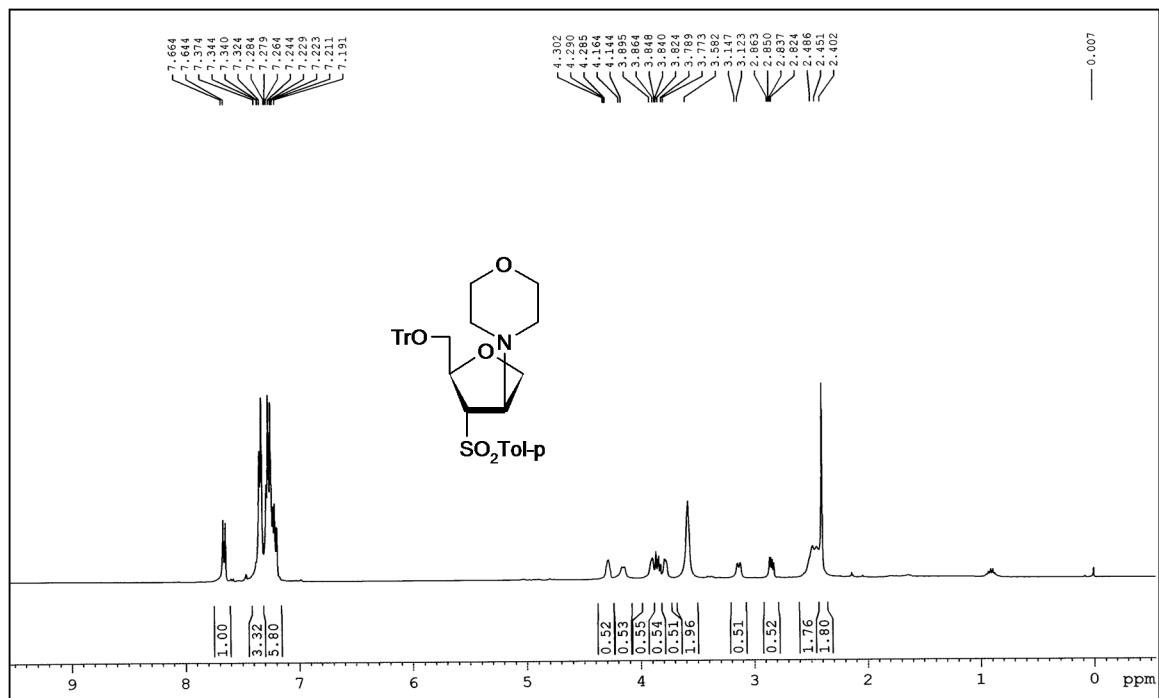


Figure S87. DEPT spectrum of compound 33.

Figure S88. ¹H-NMR spectrum of compound 34.

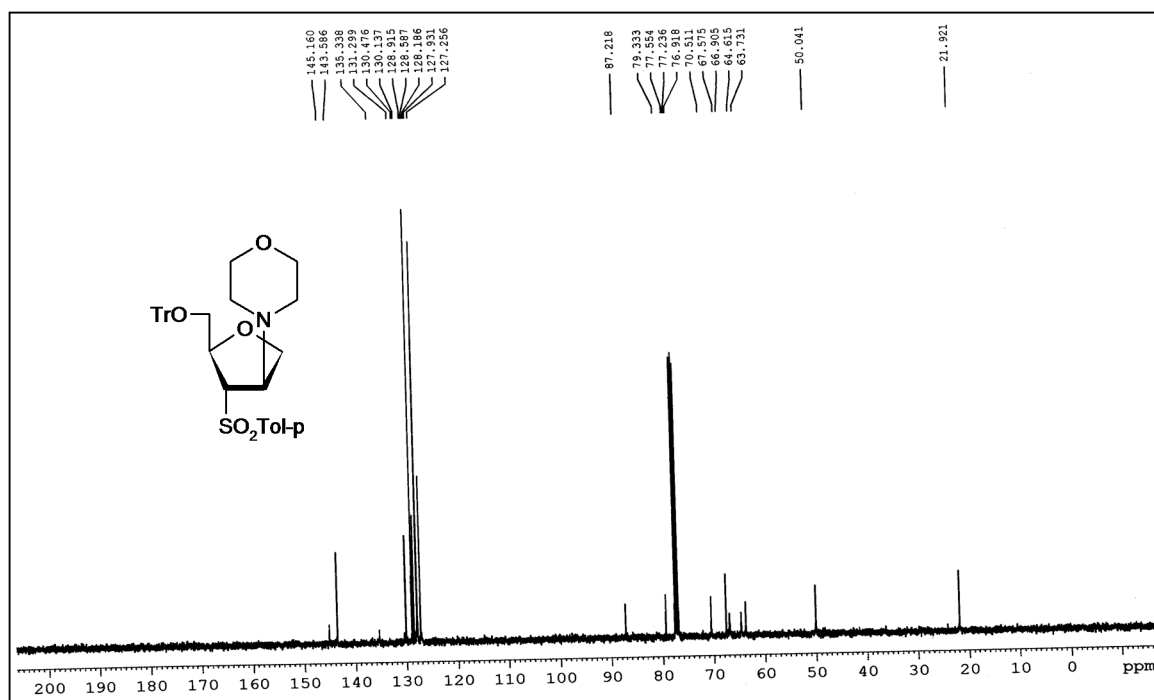
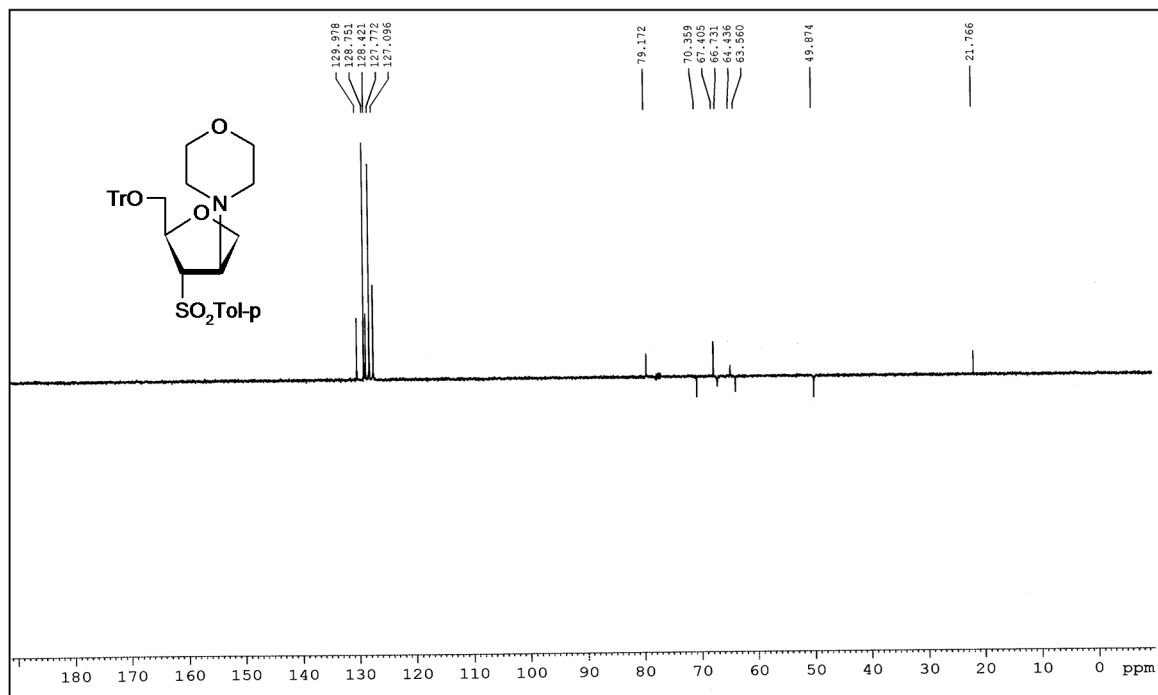
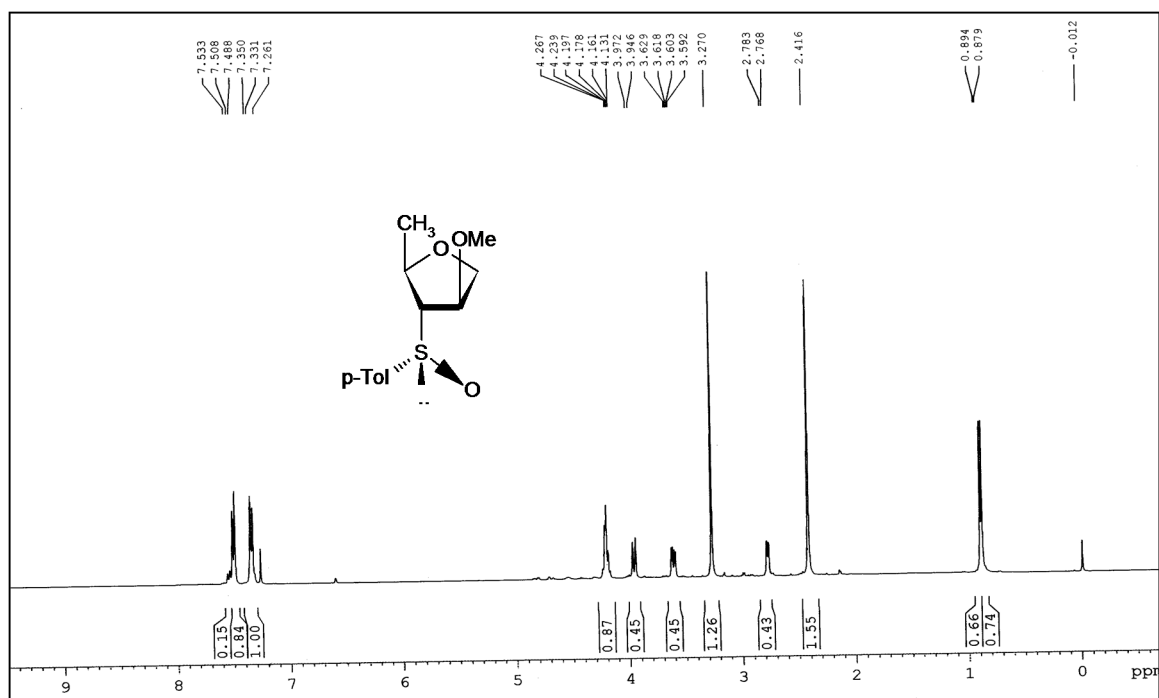
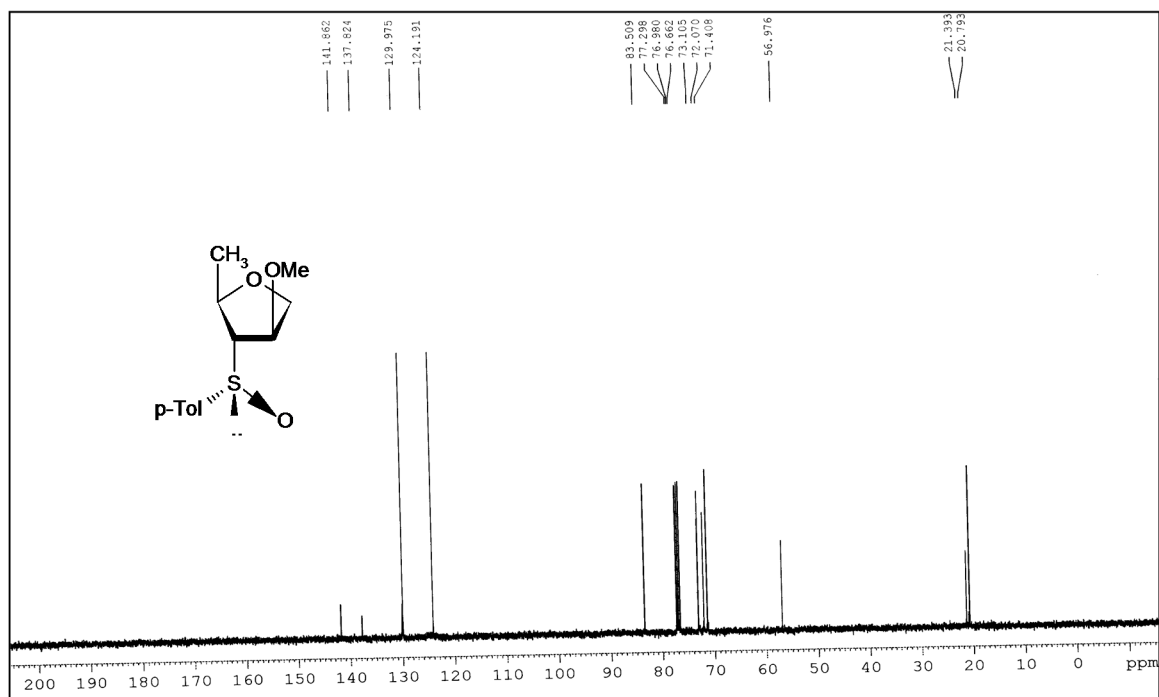
Figure S89. ¹³C-NMR spectrum of compound 34.

Figure S90. DEPT spectrum of compound 34.

Figure S91. ¹H-NMR spectrum of compound 35Ss.Figure S92. ¹³C-NMR spectrum of compound 35Ss.

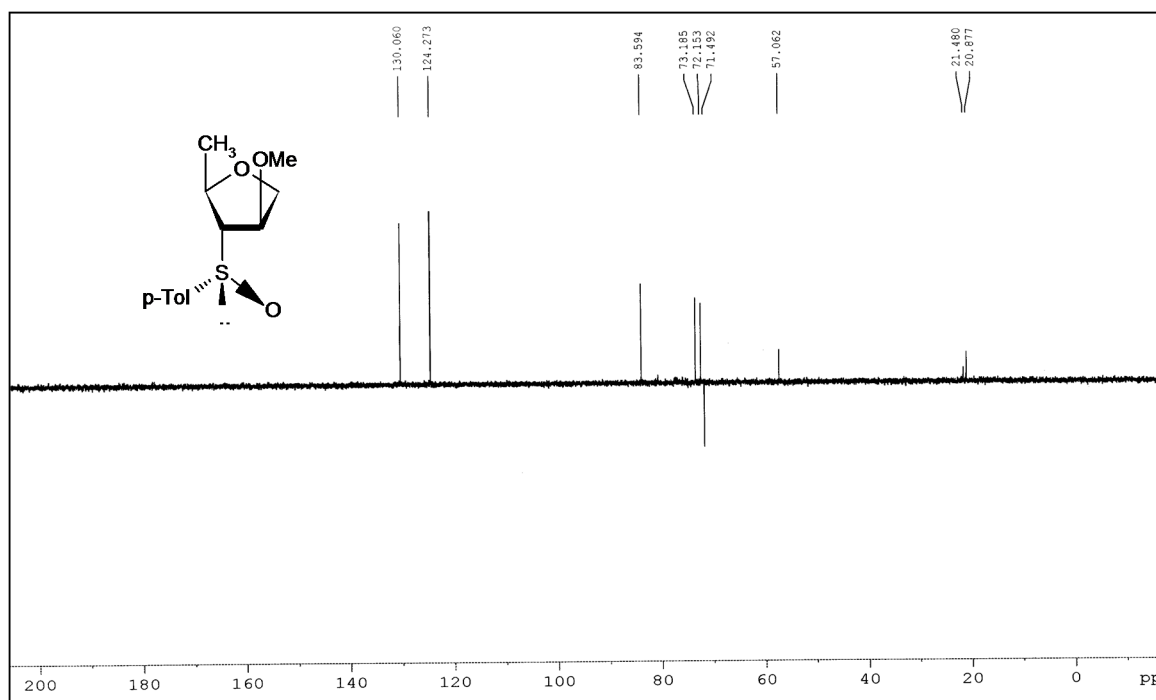
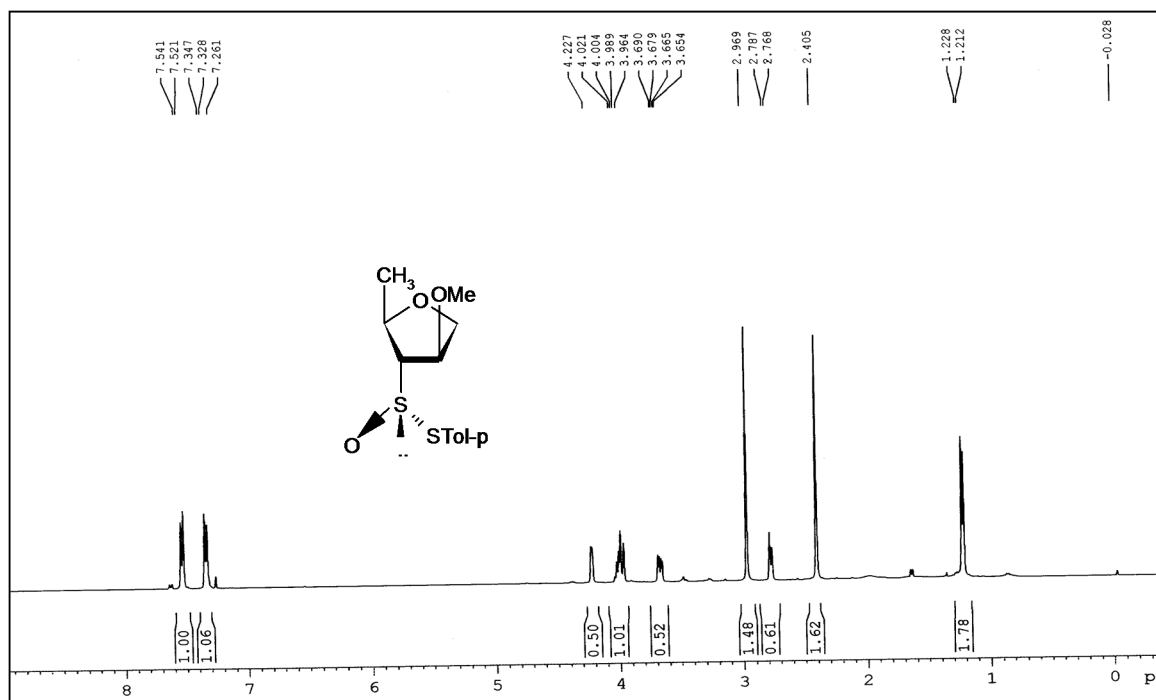


Figure S93. DEPT spectrum of compound 35Ss.

Figure S94. ¹H-NMR spectrum of compound 35Rs.

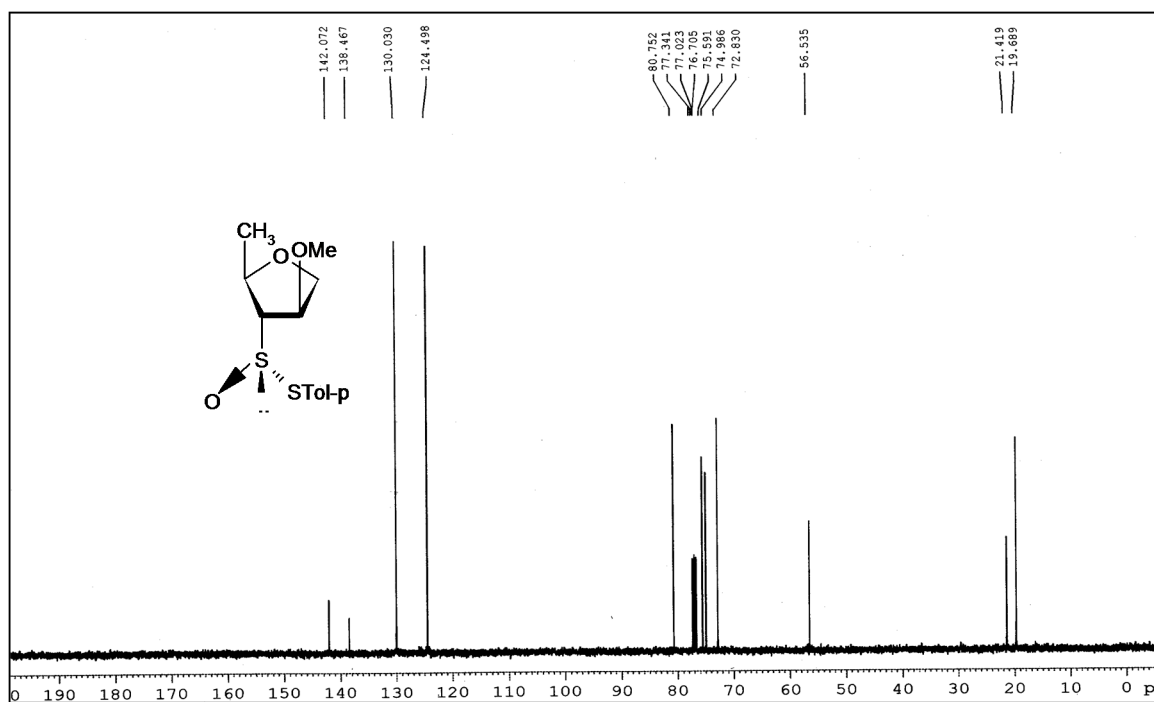
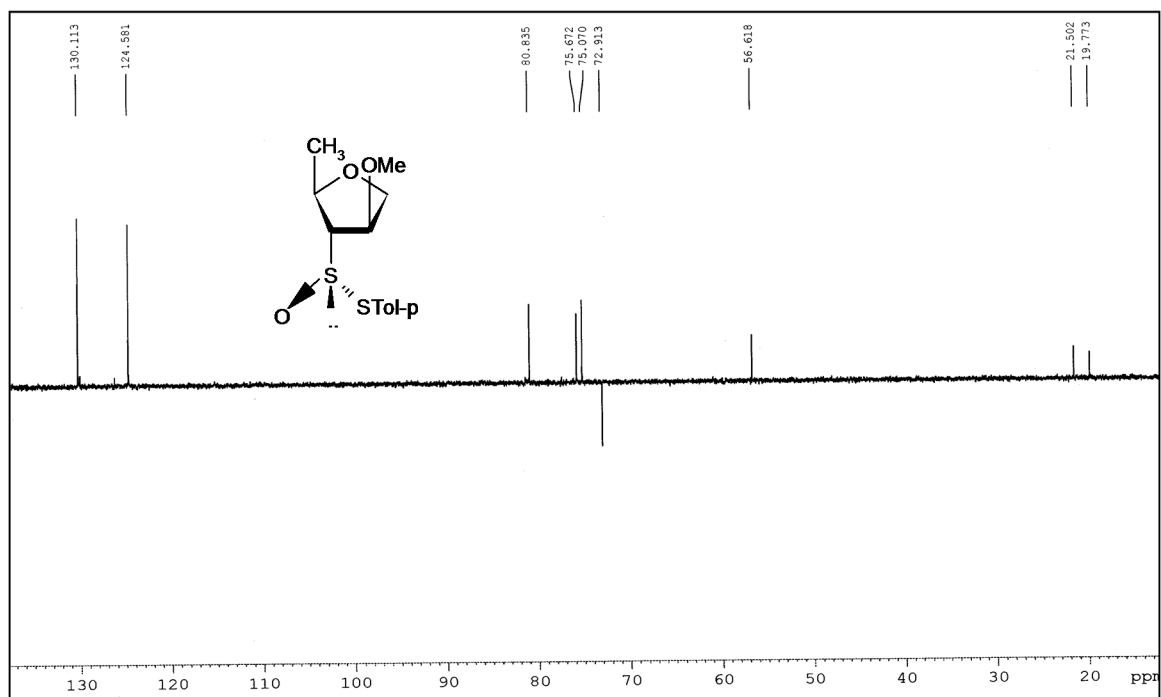
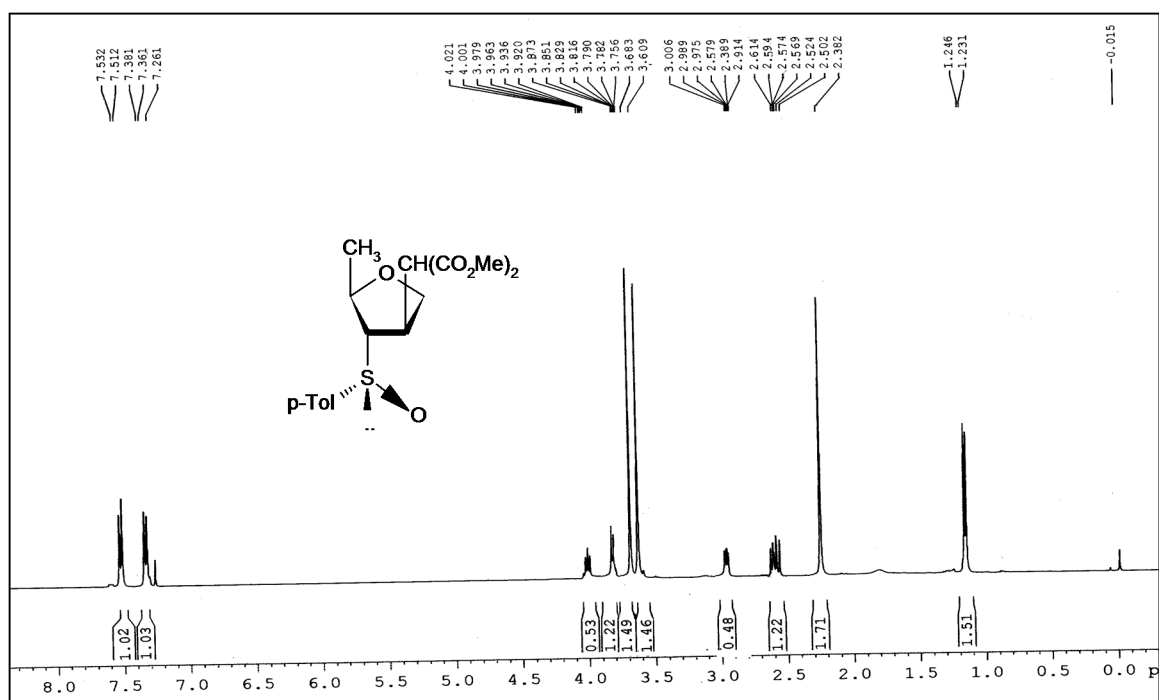
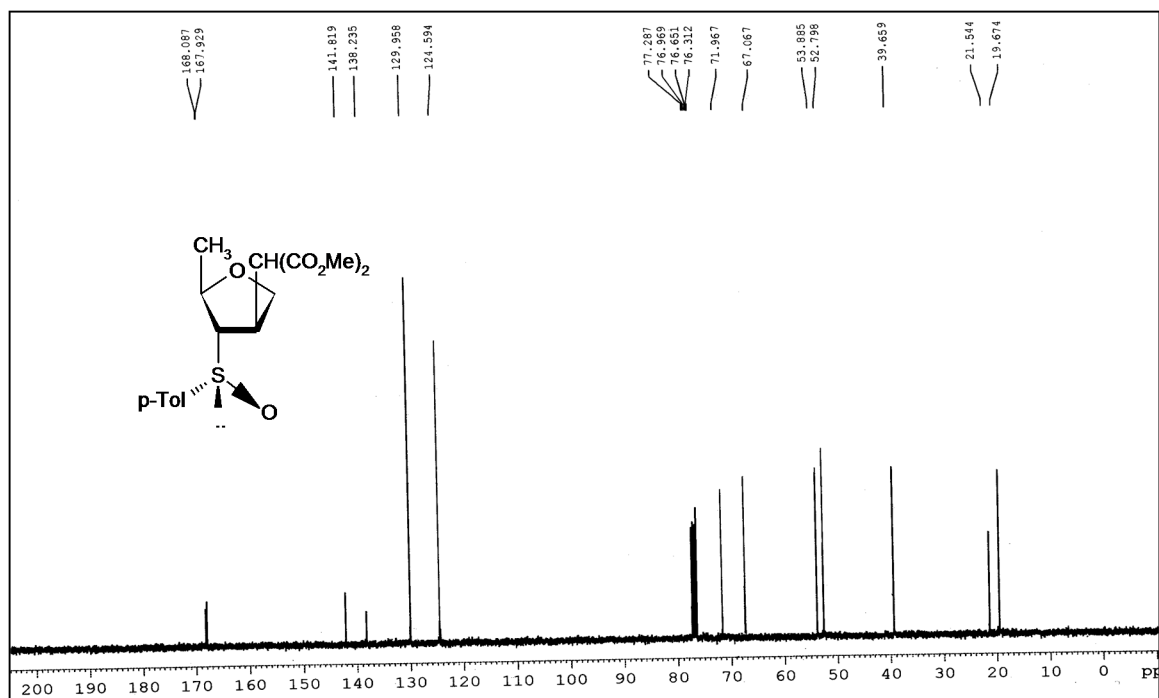
Figure S95. ¹³C-NMR spectrum of compound 35Rs.

Figure S96. DEPT spectrum of compound 35Rs.

Figure S97. ¹H-NMR spectrum of compound 36Ss.Figure S98. ¹³C-NMR spectrum of compound 36Ss.

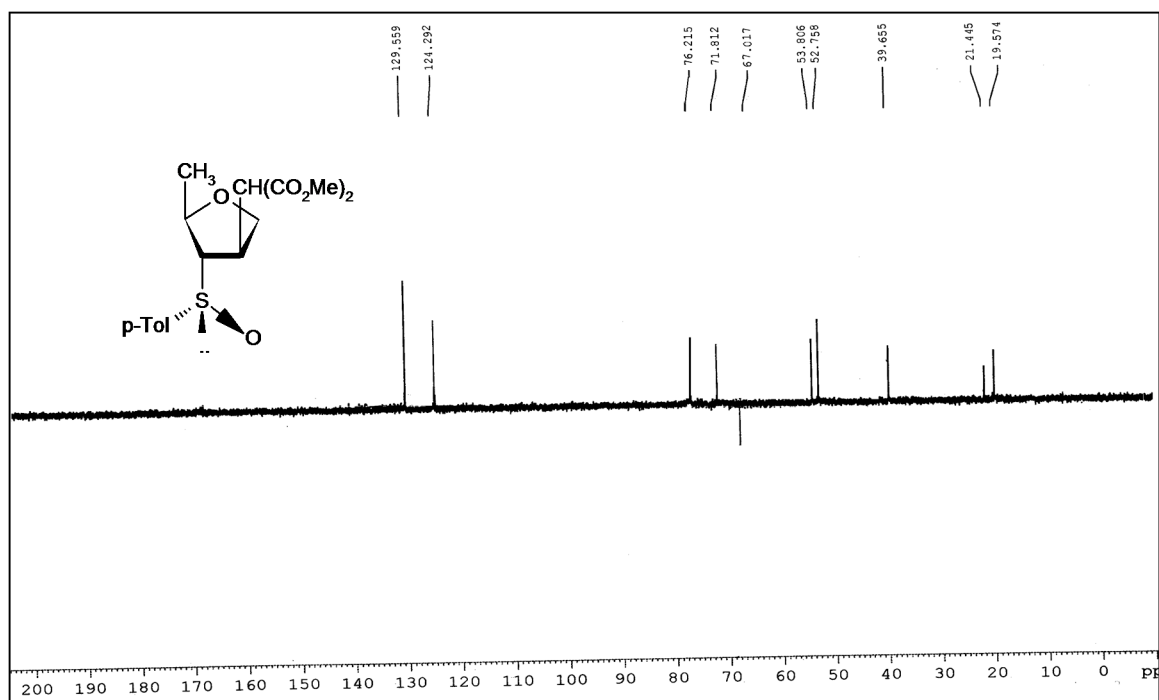
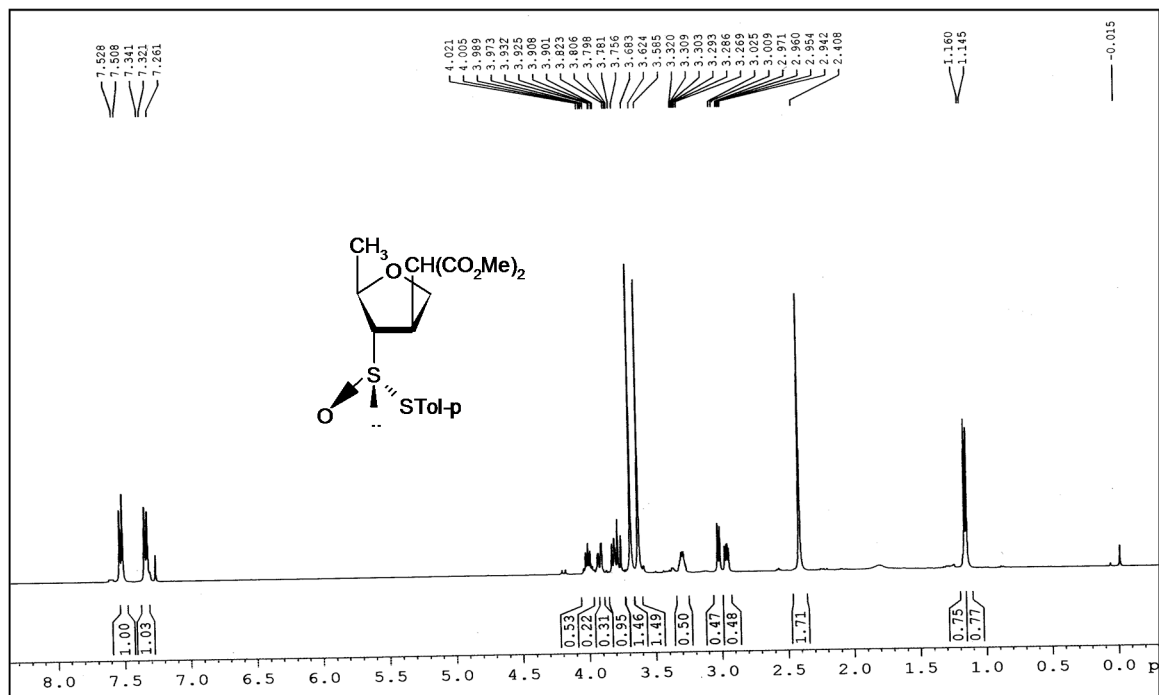


Figure S99. DEPT spectrum of compound 36Ss.

Figure S100. ^1H -NMR spectrum of compound 36Rs.

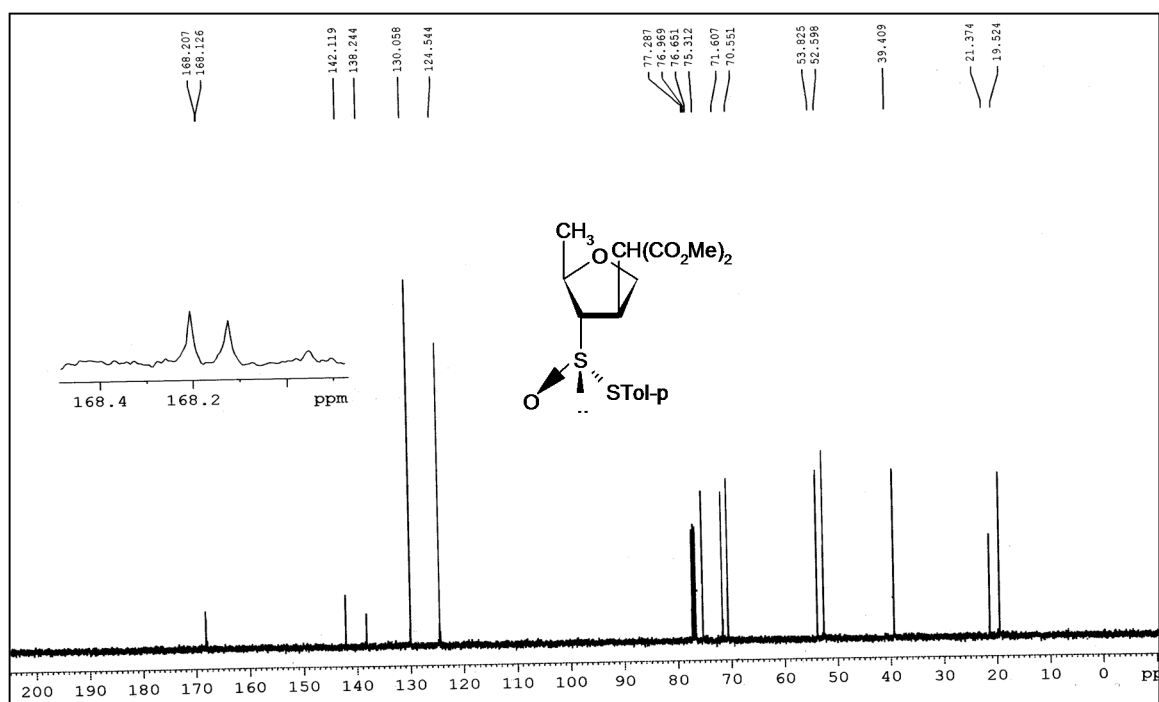
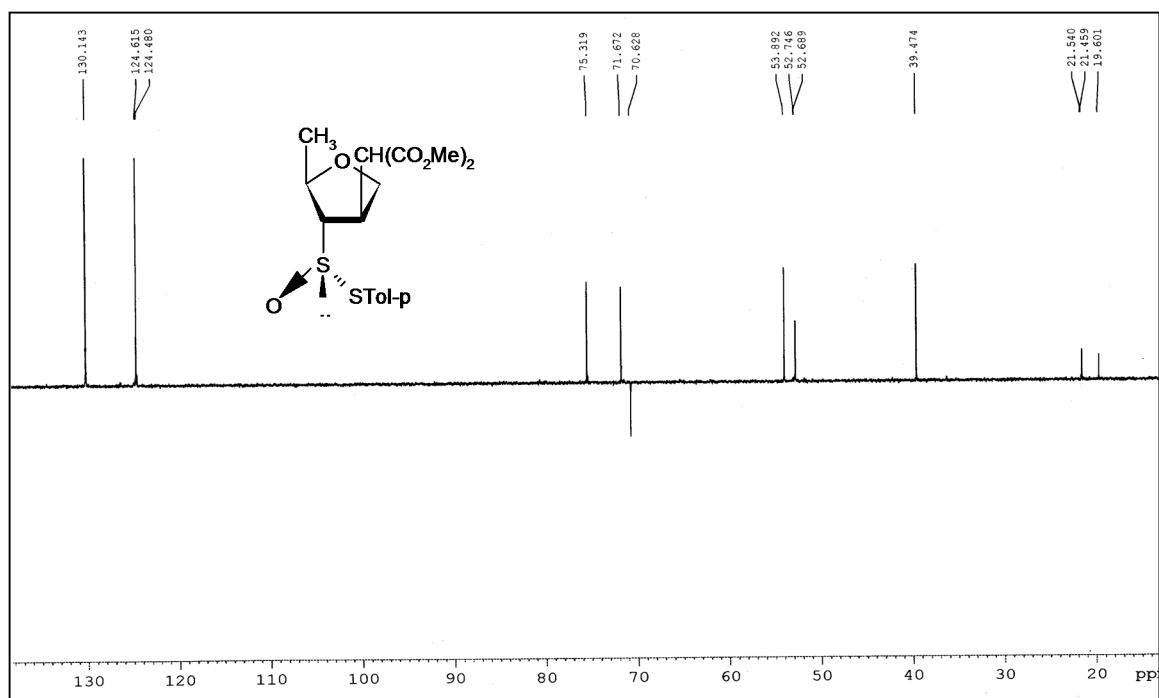
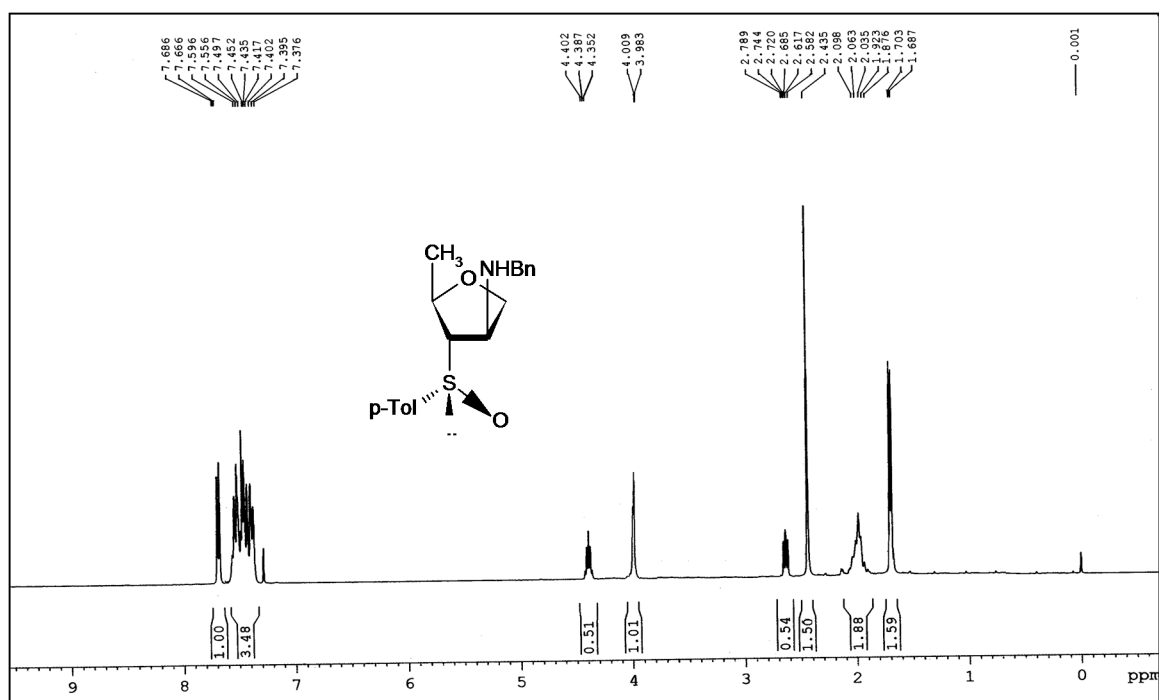
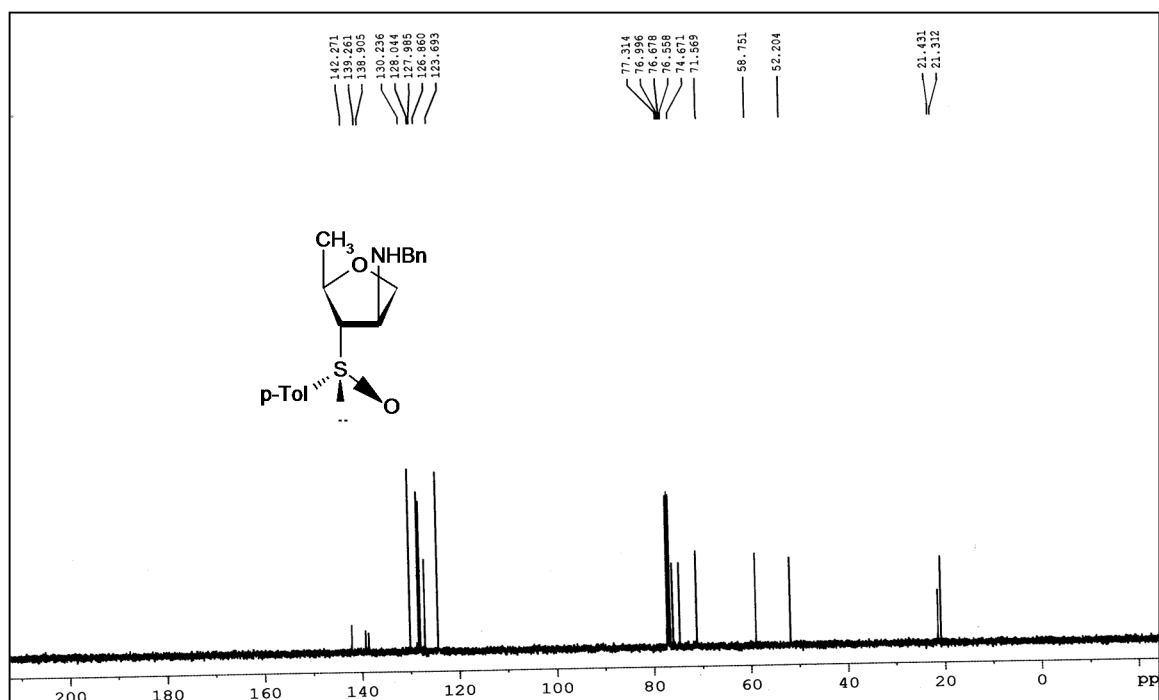
Figure S101. ¹³C-NMR spectrum of compound 36Rs.

Figure S102. DEPT spectrum of compound 36Rs.

Figure S103. ¹H-NMR spectrum of compound 37Ss.Figure S104. ¹³C-NMR spectrum of compound 37Ss.

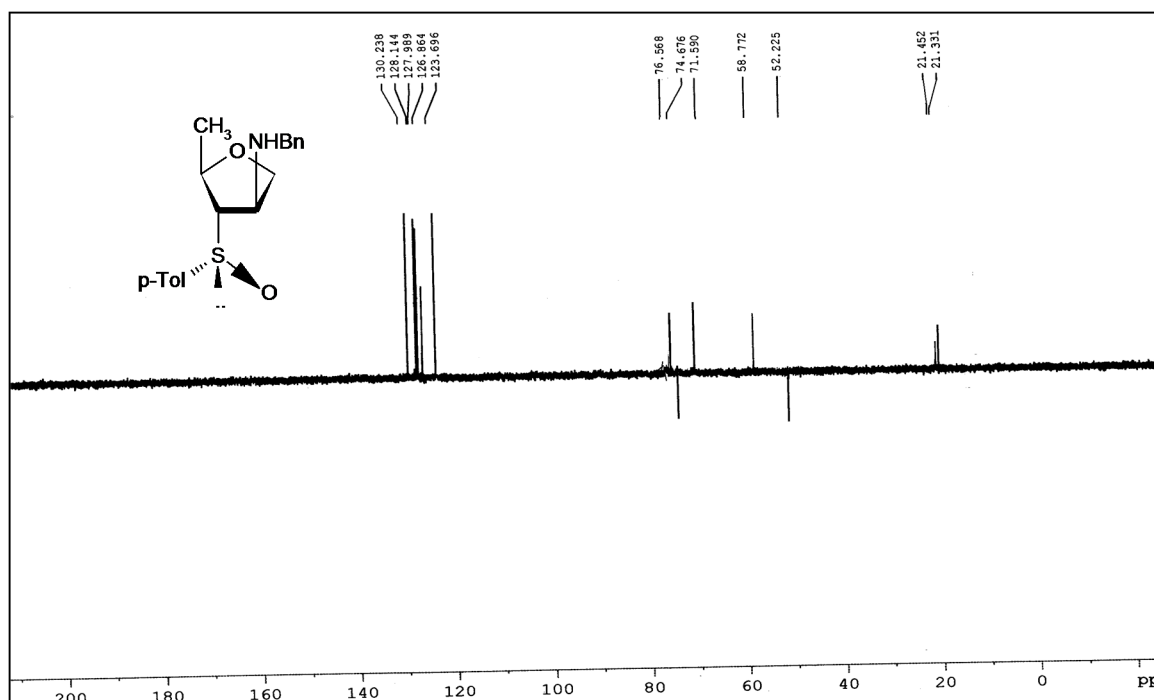
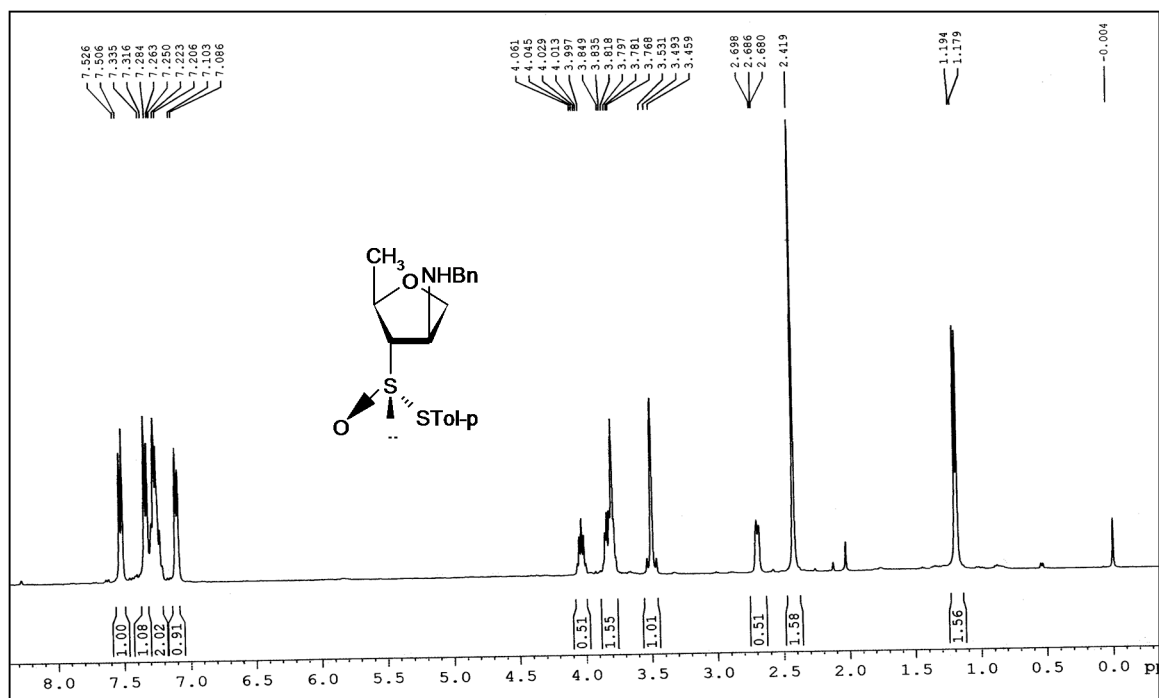


Figure S105. DEPT spectrum of compound 37Ss.

Figure S106. ¹H-NMR spectrum of compound 37Rs.

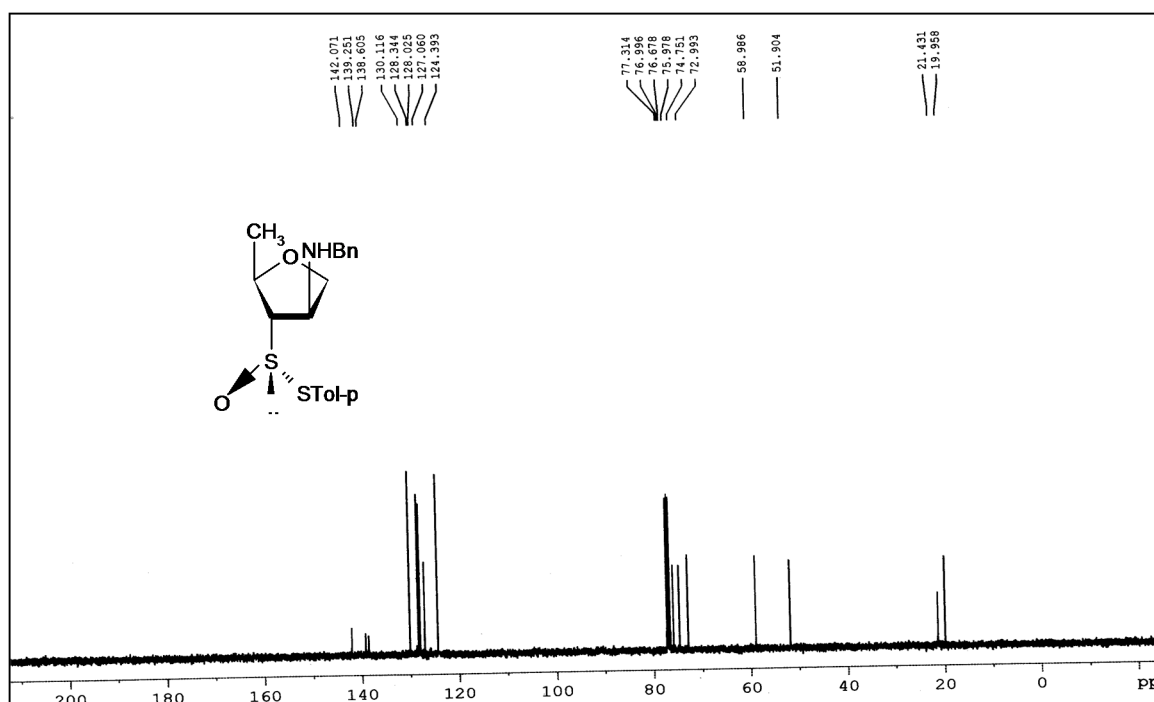
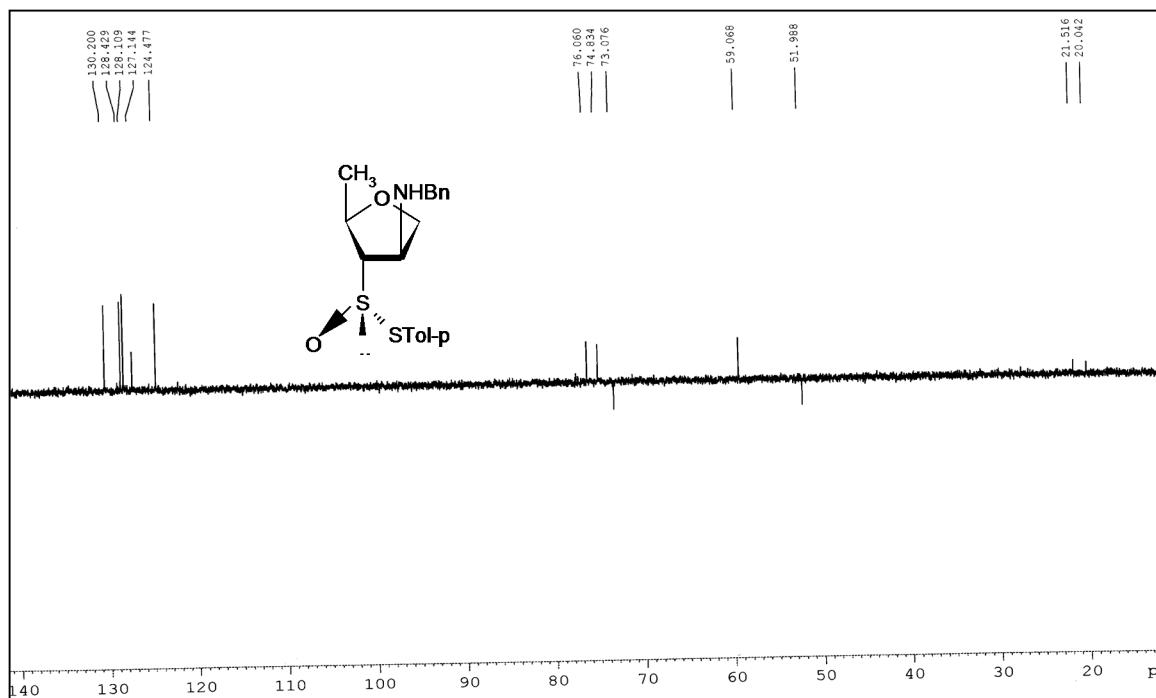
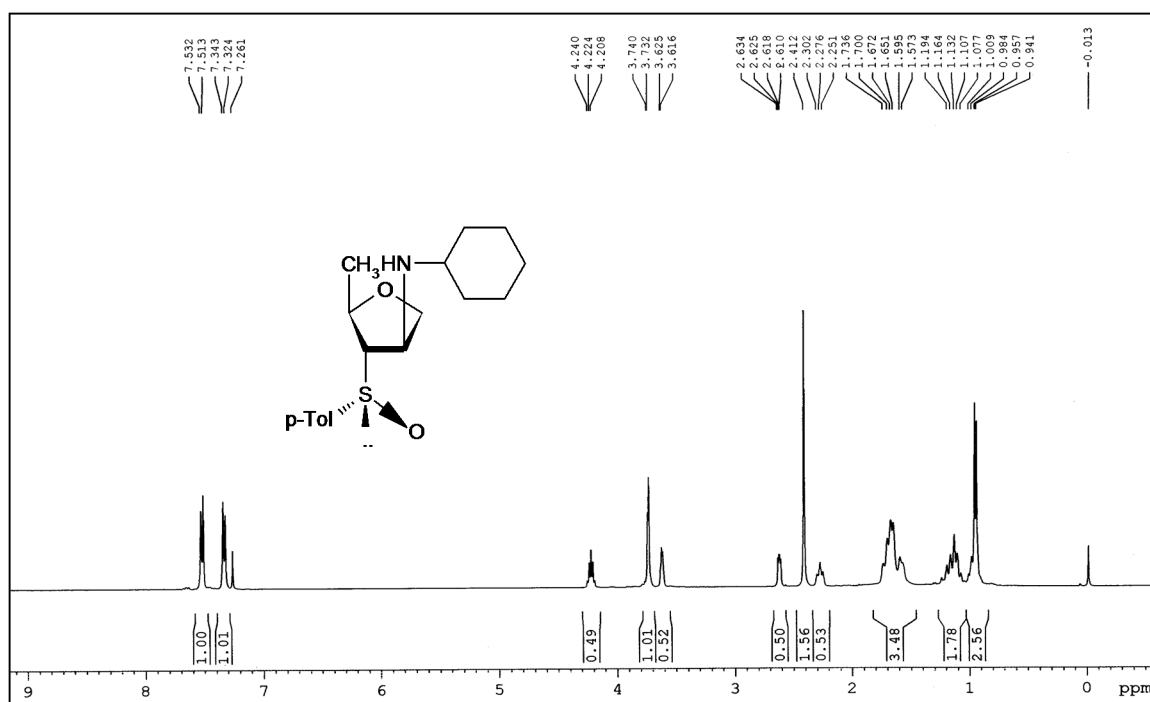
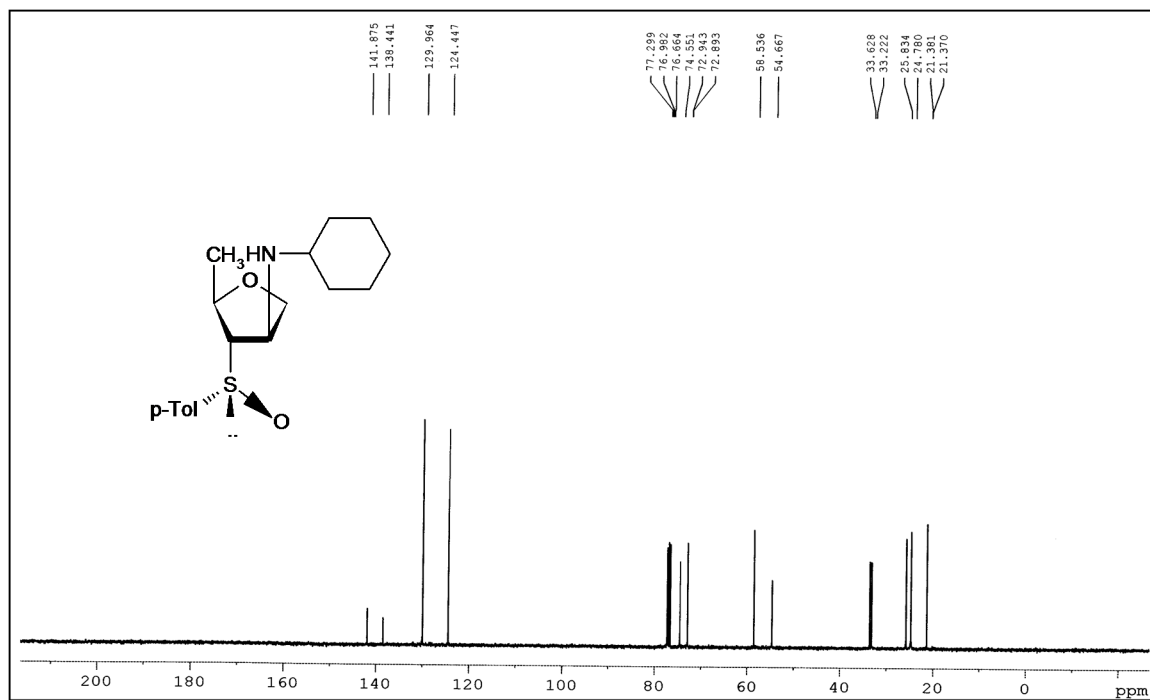
Figure S107. ¹³C-NMR spectrum of compound 37Rs.

Figure S108. DEPT spectrum of compound 37Rs.

Figure S109. ¹H-NMR spectrum of compound 38Ss.Figure S110. ¹³C-NMR spectrum of compound 38Ss.

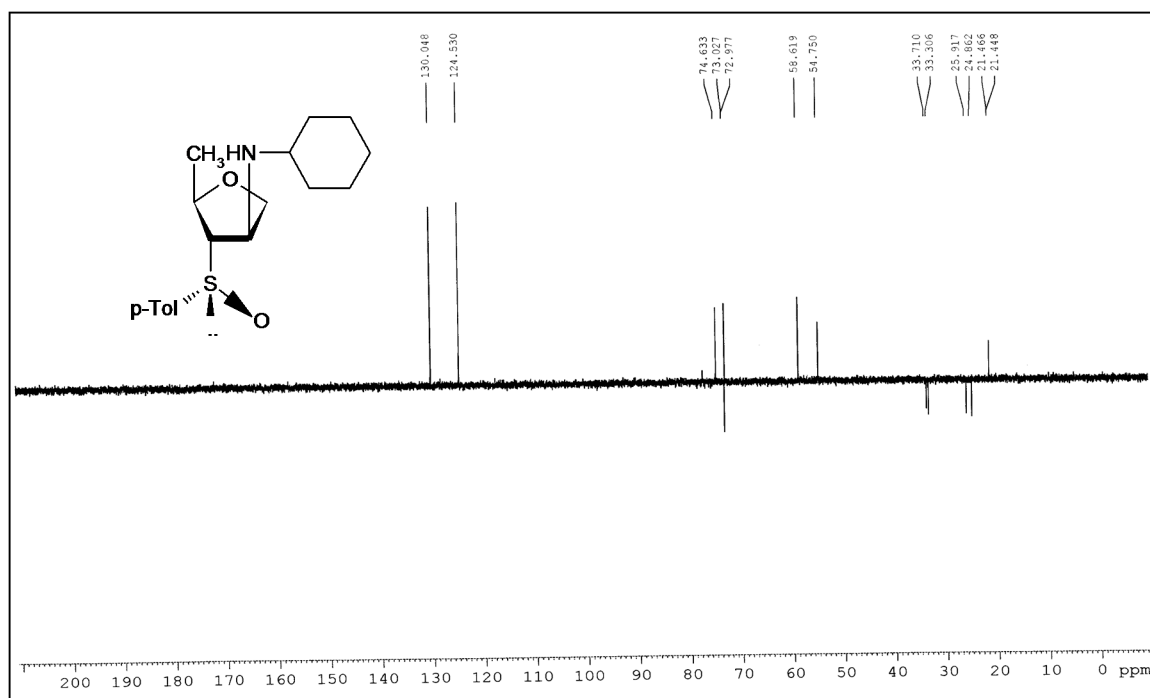
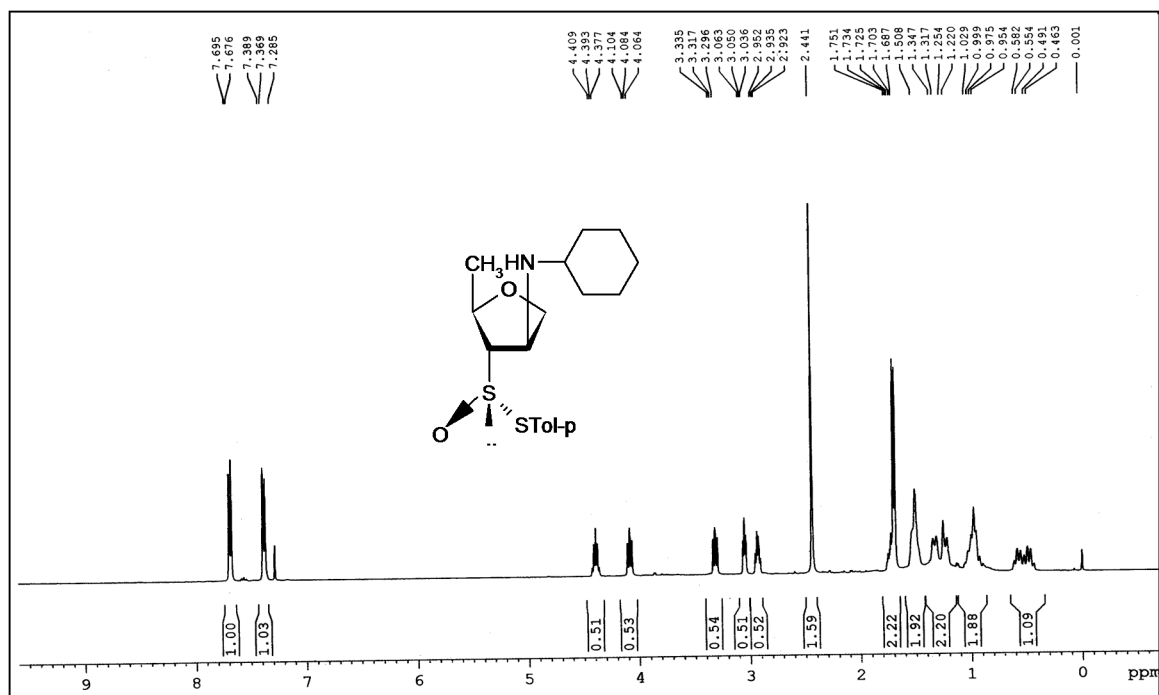


Figure S111. DEPT spectrum of compound 38Ss.

Figure S112. ¹H-NMR spectrum of compound 38Rs.

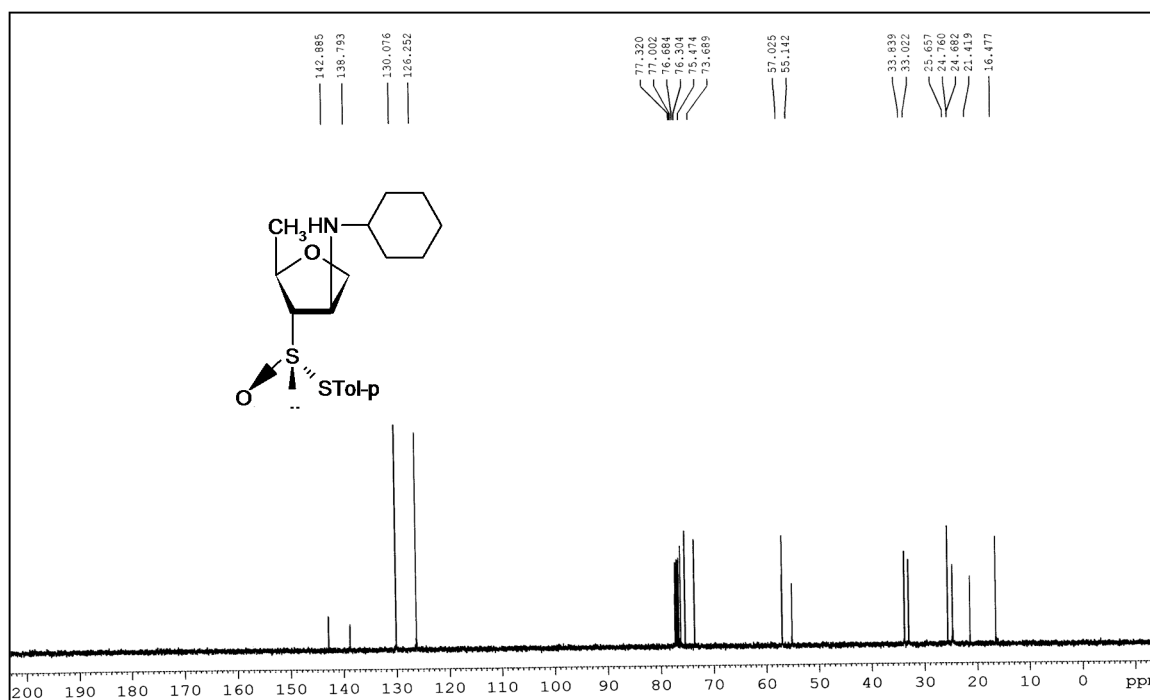
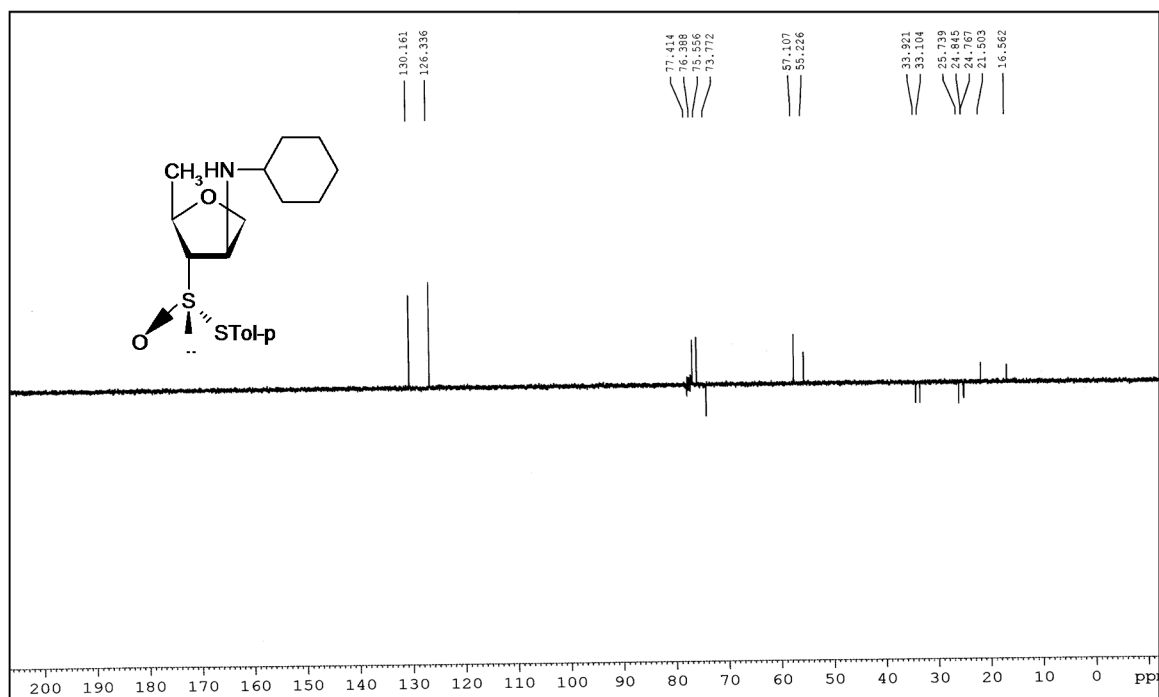
Figure S113. ¹³C-NMR spectrum of compound 38Rs.

Figure S114. DEPT spectrum of compound 38Rs.