

# Microbiological Screening of 5-Functionalized Pyrazoles for the Future Development of Optimized Pyrazole-Based Delivery Systems

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## Supporting Information:

**Figure S1.** <sup>1</sup>H NMR of **4c**.

**Figure S2.** <sup>13</sup>C NMR of **4c**.

**Figure S3.** IR of **4c**

**Figure S4.** <sup>1</sup>H NMR of **5c**.

**Figure S5.** <sup>13</sup>C NMR of **5c**.

**Figure S6.** IR of **5c**.

**Figure S7.** <sup>1</sup>H NMR of **5d**.

**Figure S8.** <sup>13</sup>C NMR of **5d**.

**Figure S9.** IR of **5d**.

**Figure S10.** <sup>1</sup>H NMR of **6**.

**Figure S11.** <sup>13</sup>C NMR of **6**.

**Figure S12.** IR of **6**.

**Figure S13.** <sup>1</sup>H NMR of **7**.

**Figure S14.** <sup>13</sup>C NMR of **7**.

**Figure S15.** IR of **7**.

Figure S1.  $^1\text{H}$  NMR of 4c.

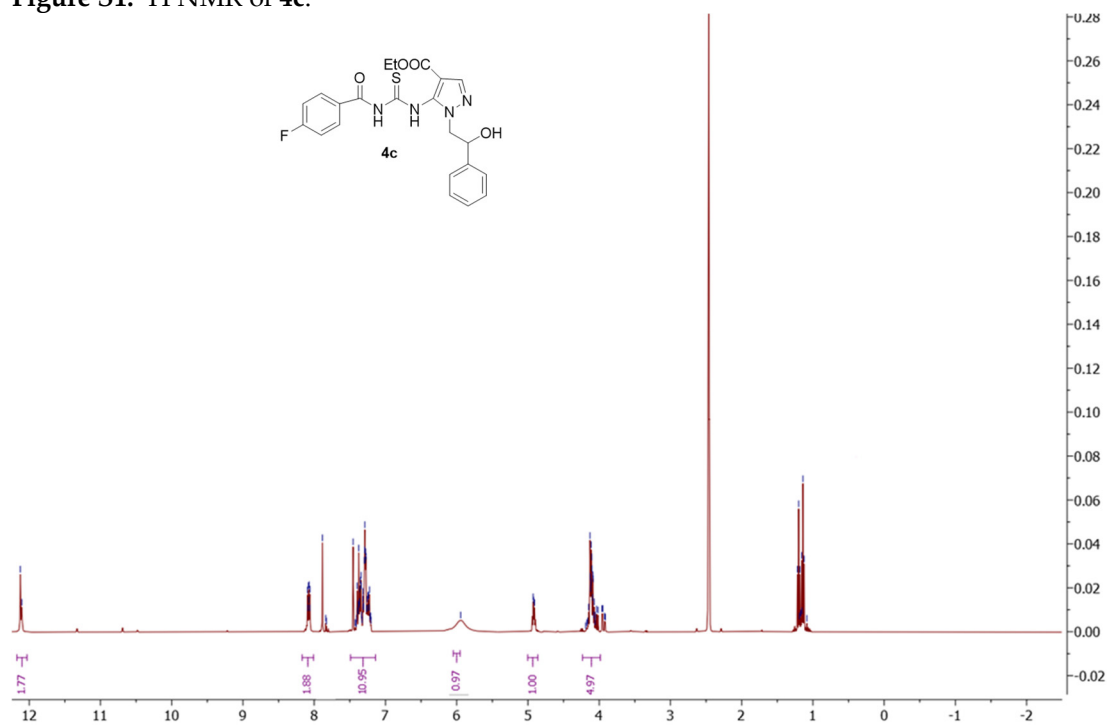


Figure S2.  $^{13}\text{C}$  NMR of 4c.

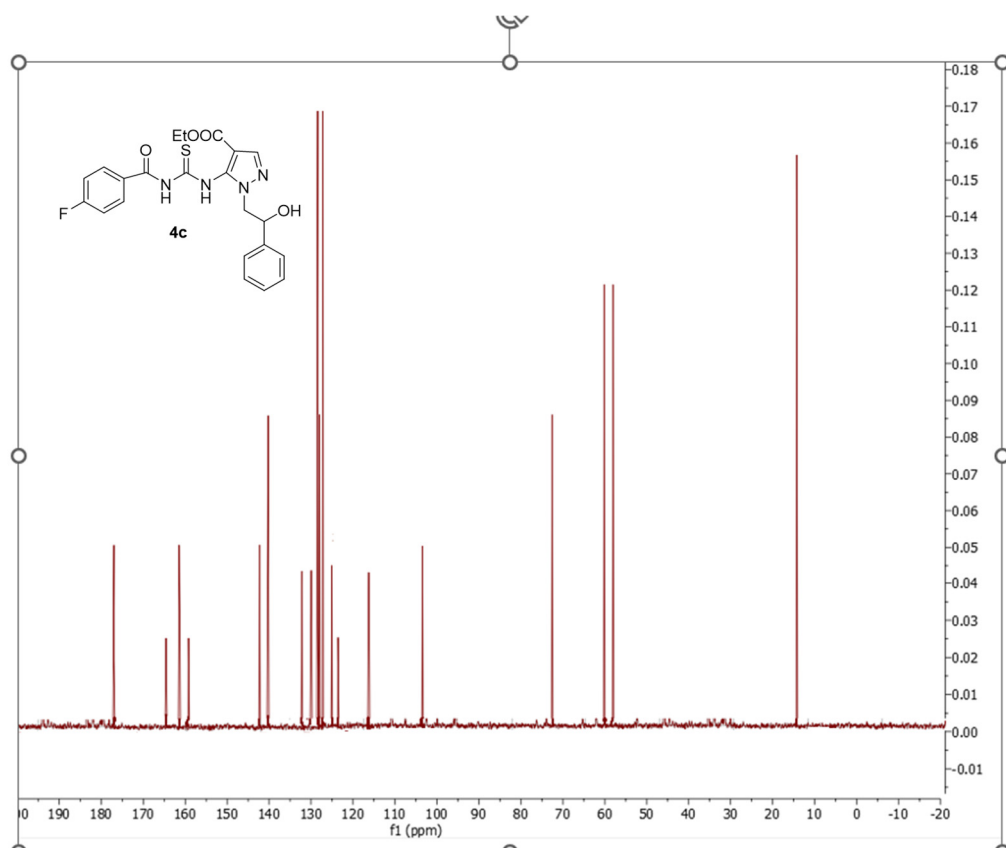


Figure S3. IR of 4c

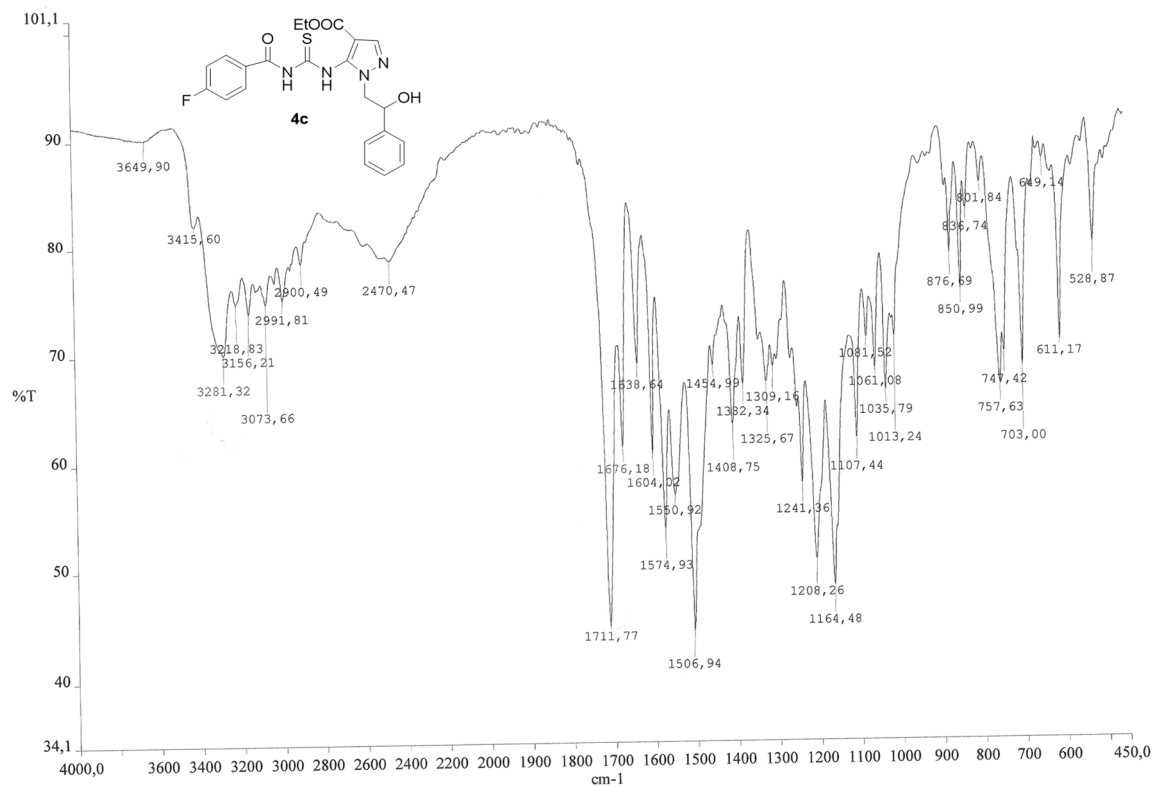
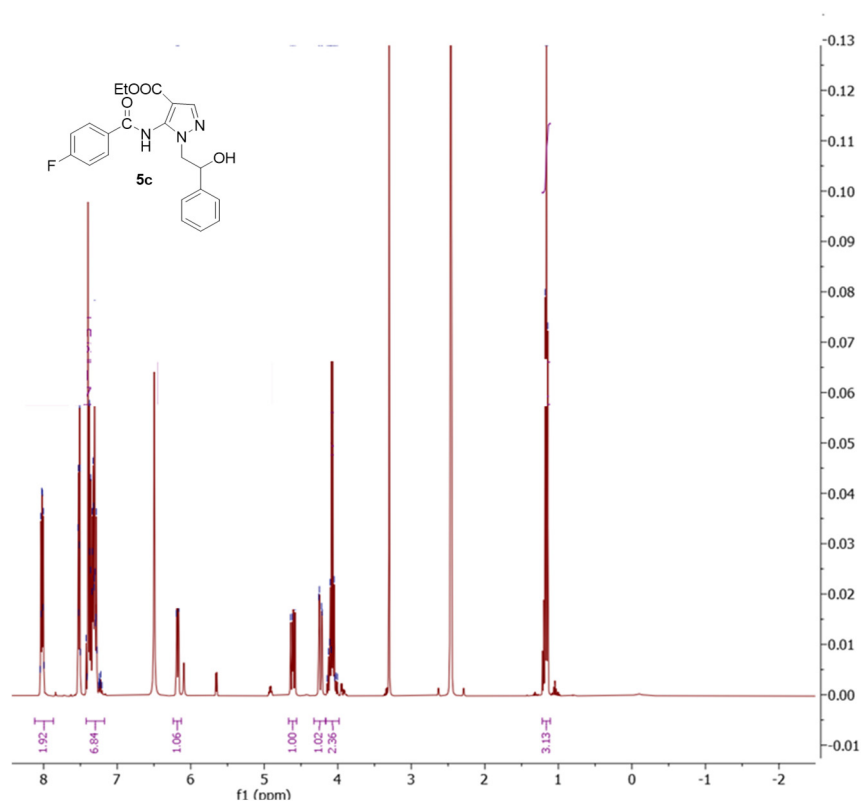


Figure S4. <sup>1</sup>H NMR of 5c.



[illegible]

106,6

100

95

90

85

80

75

70

65

60

55

50

45

40

35

30

25

20

15

10

4,8

%T

4000,0

3000

2000

cm-1

1500

1000

450,0

EtOOC

F

5c

OH

3400,26

3226,49

3077,22

3035,36

2978,50

1708,70

1684,54

1625,48

1554,10

1540,28

1495,18

1449,31

1412,99

1378,07

1312,86

1278,20

1237,10

1205,43

1172,22

1154,00

1112,27

1093,14

1037,43

1015,78

1002,64

980,75

953,51

914,95

885,03

854,25

802,58

784,88

767,62

757,76

699,92

685,88

622,38

596,27

580,90

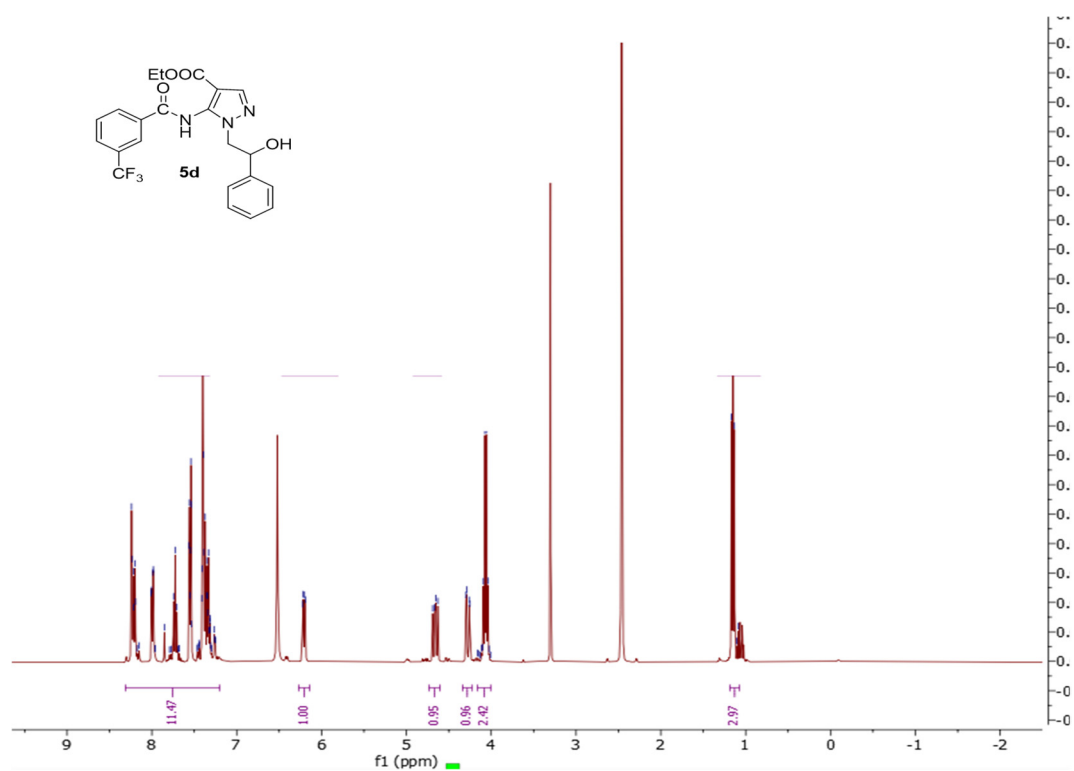
525,15

498,79

477,77

mb dovrebbe essere  
regio M. perche  
la nuova e 1886 e  
tipo delle ammide  
non da rimpia

**Figure S7.**  $^1\text{H}$  NMR of **5d**.



**Figure S8.**  $^{13}\text{C}$  NMR of **5d**.

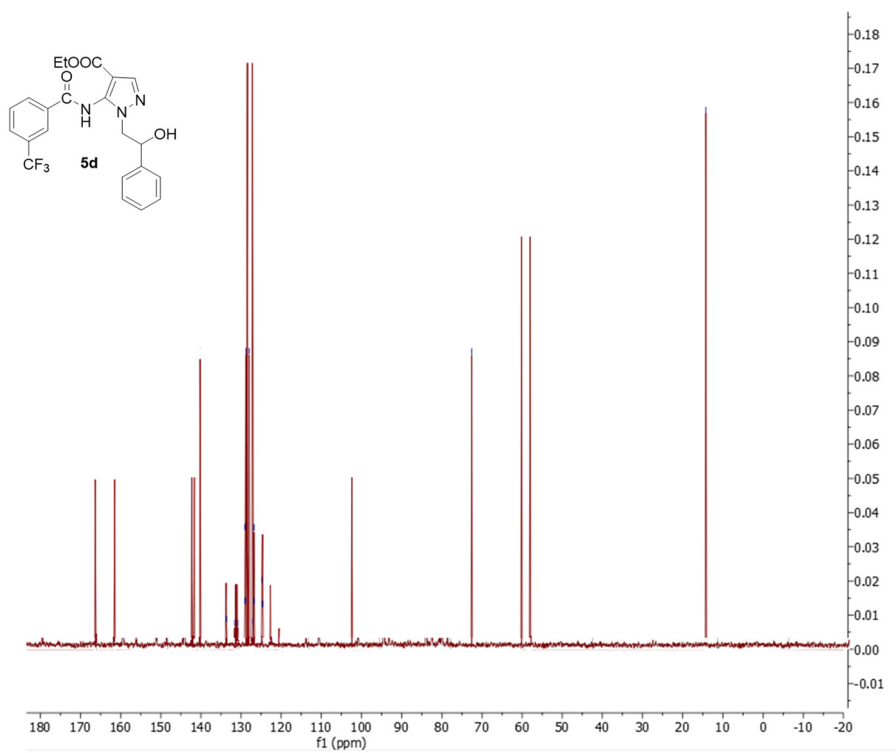


Figure S9. IR of 5d.

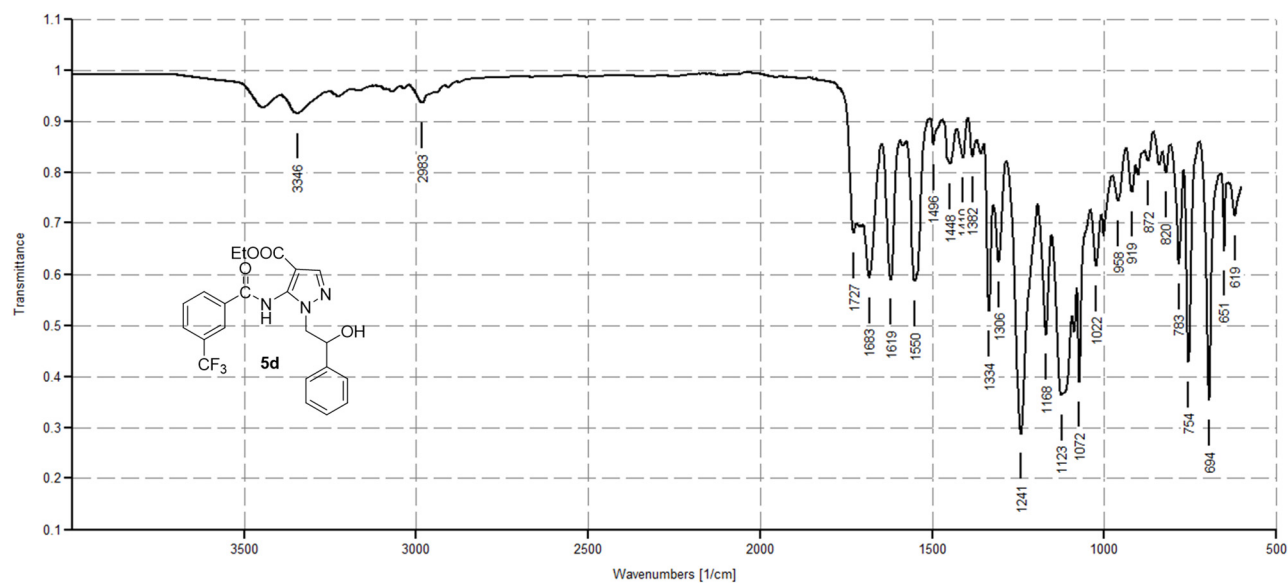
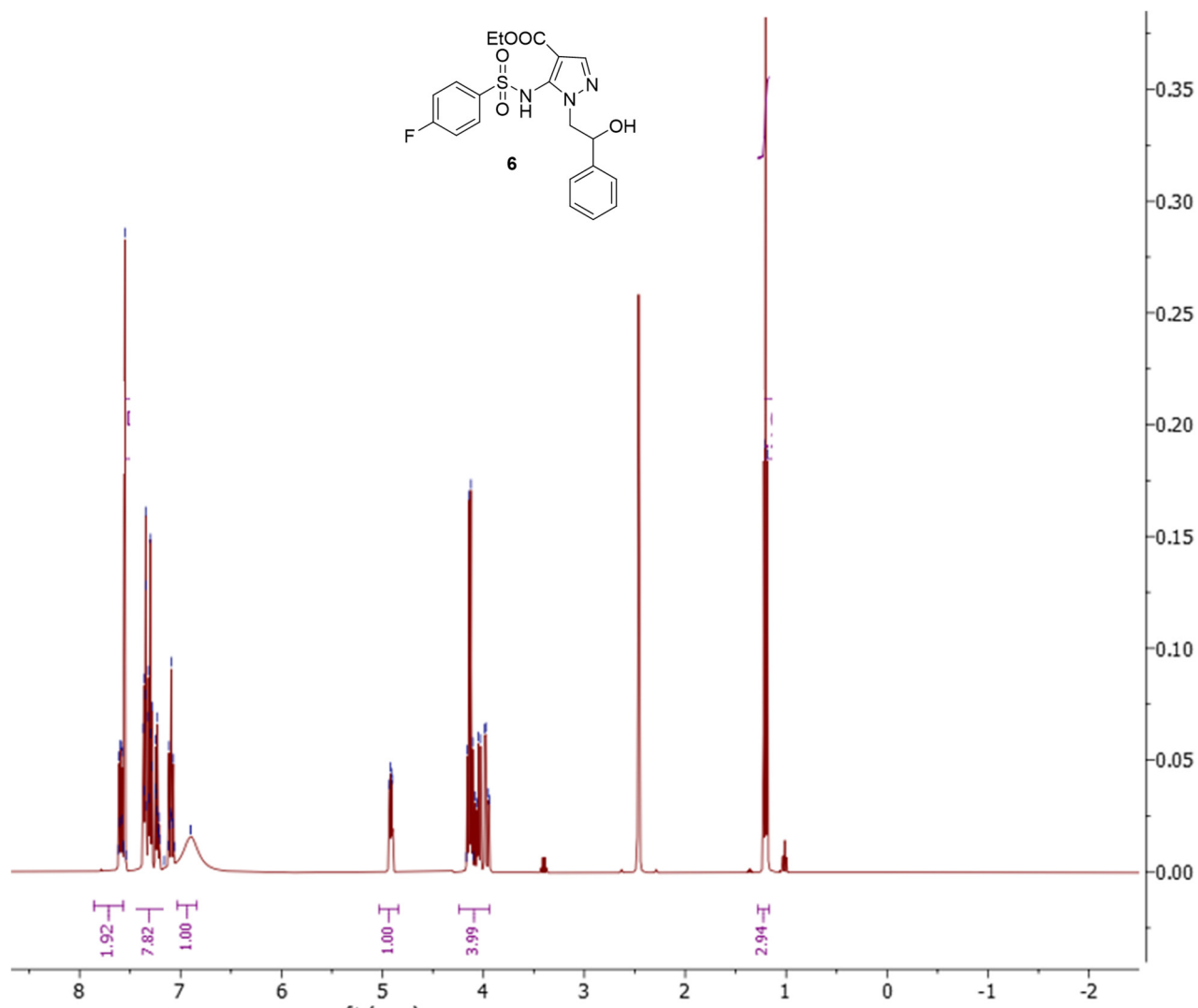
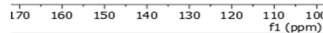
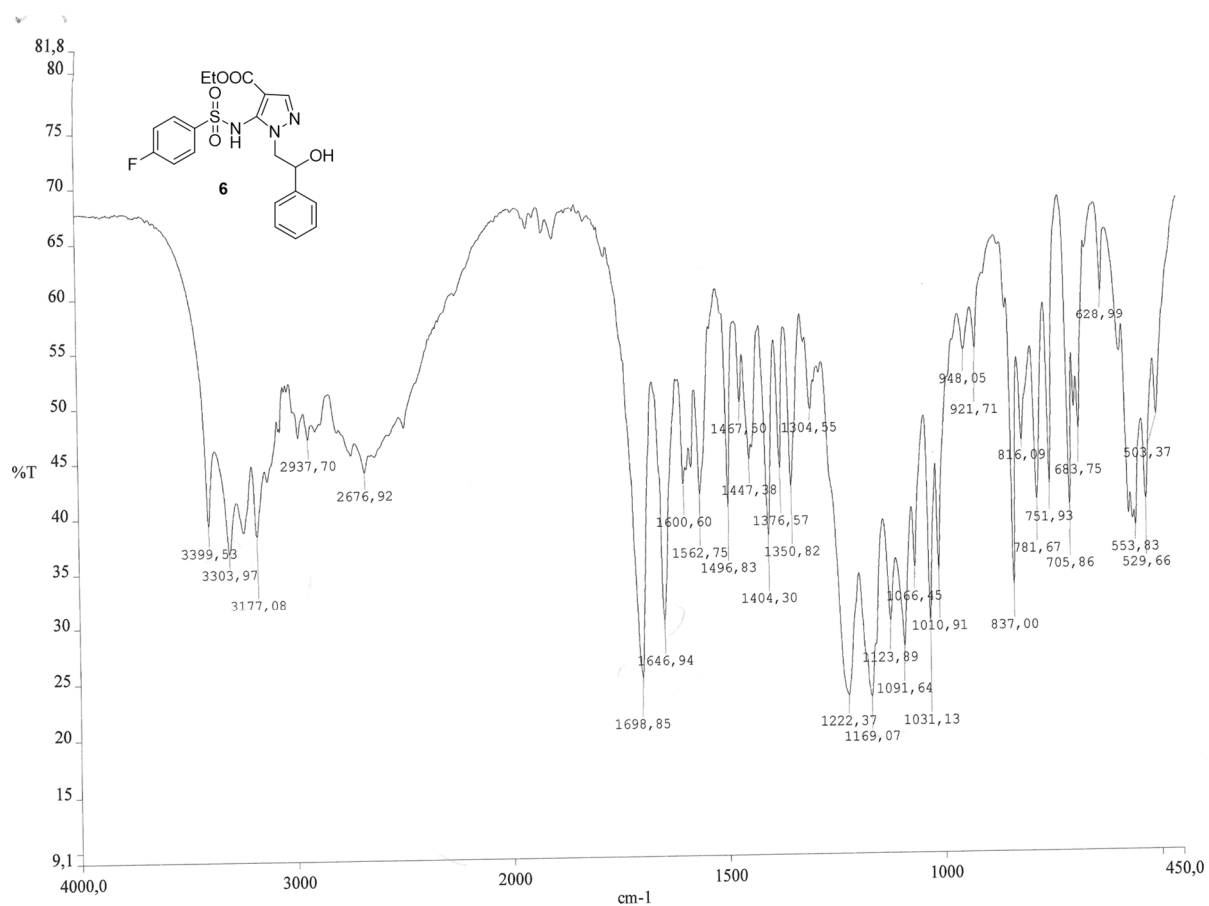
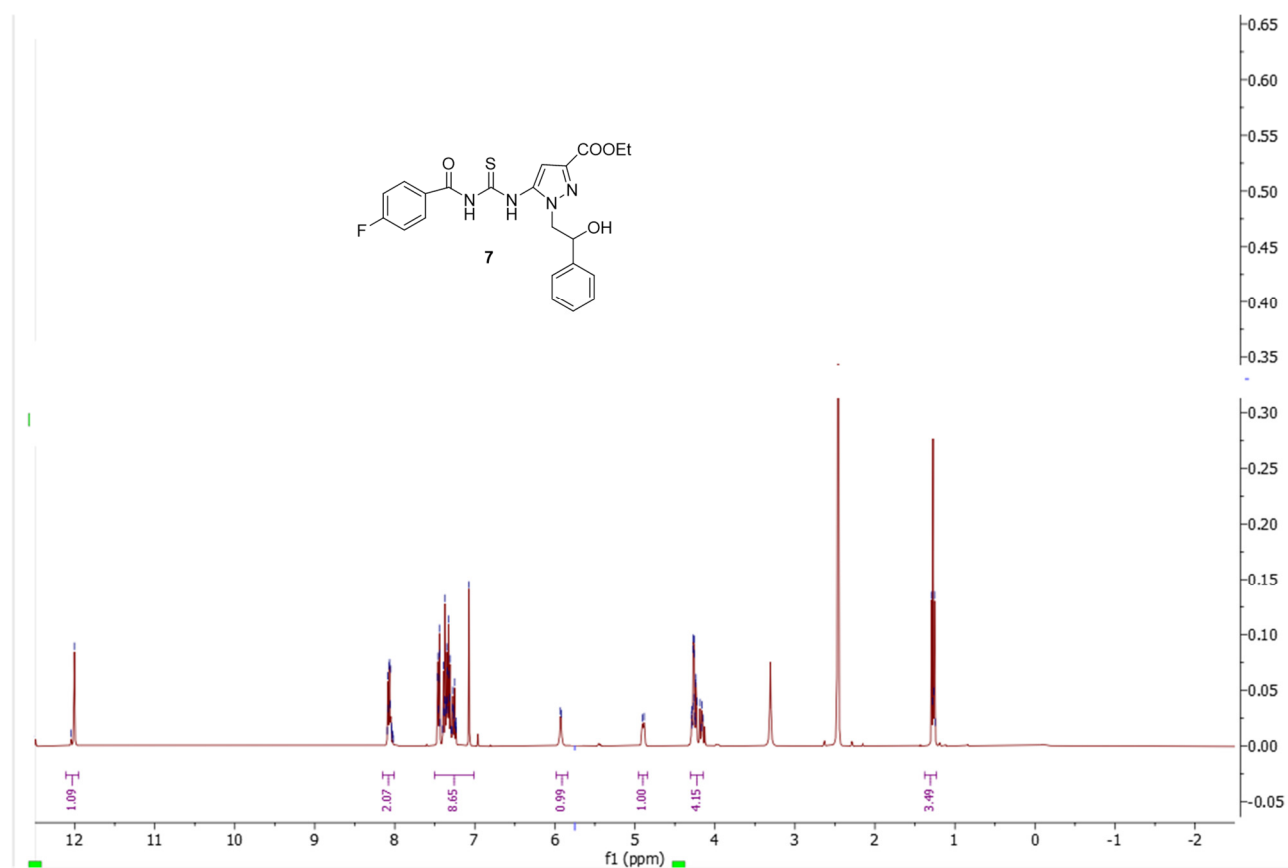


Figure S10. <sup>1</sup>H NMR of 6.



CCOC(=O)c1cnc(Cc2ccccc2)c1NS(=O)(=O)c3ccc(F)cc3CCOC(=O)c1cnc(Cc2ccccc2C(O)c3ccccc3)c1S(=O)(=O)c4ccc(F)cc4

**Figure S13.**  $^1\text{H}$  NMR of 7.



**Figure S14.**  $^{13}\text{C}$  NMR of 7.

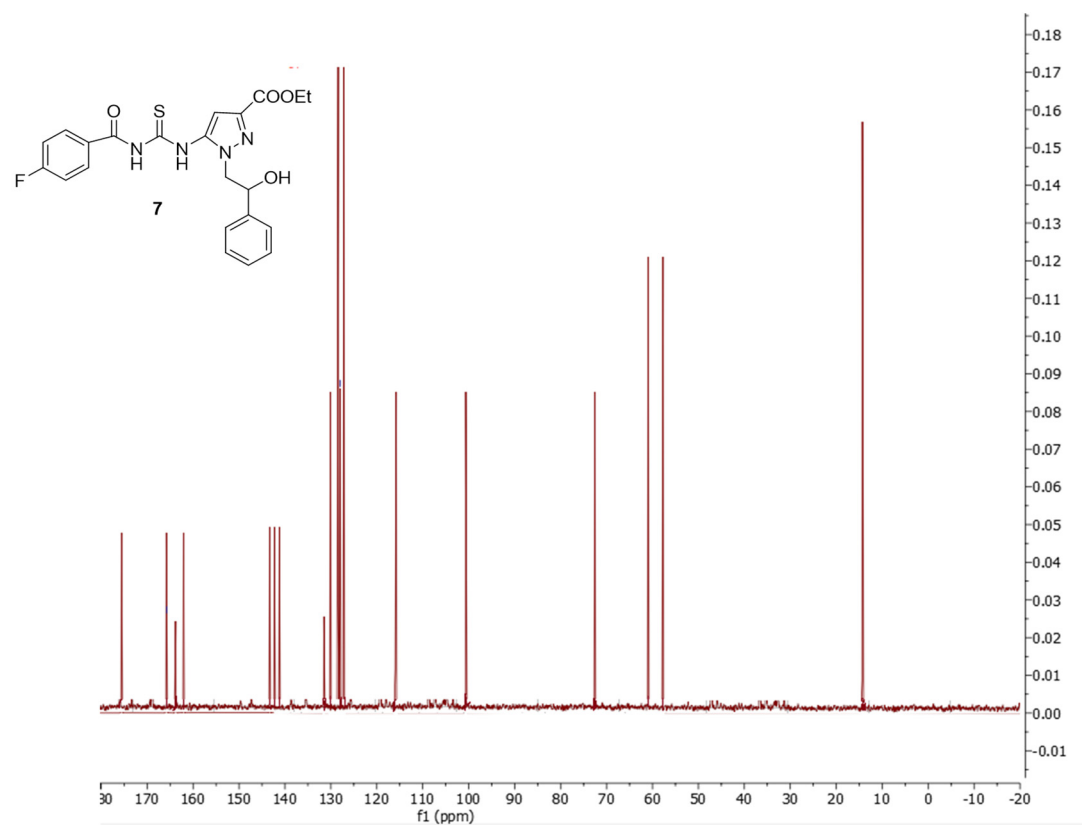




Figure S15. IR of 7.

