Supporting Information

for

A concise and practical stereoselective synthesis of ipragliflozin L-proline

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^{1}H NMR, ^{13}C NMR and HRMS spectra of compounds 1, 5, 6, 5', 6' and 8, and HPLC diagram of 5

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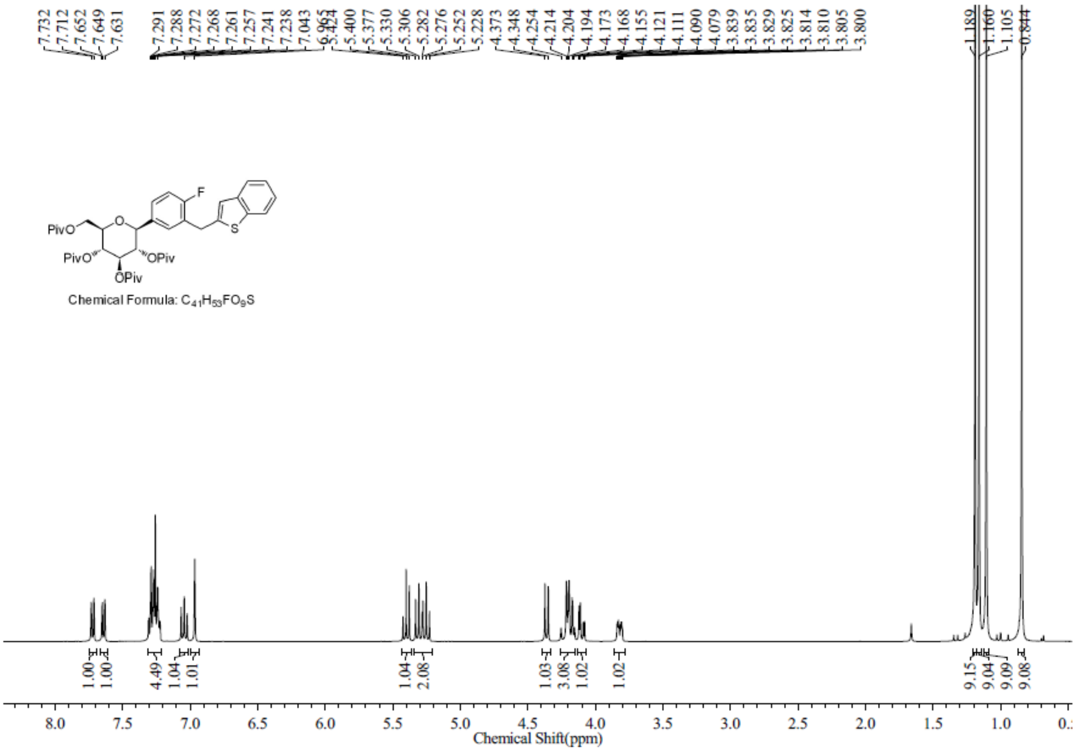
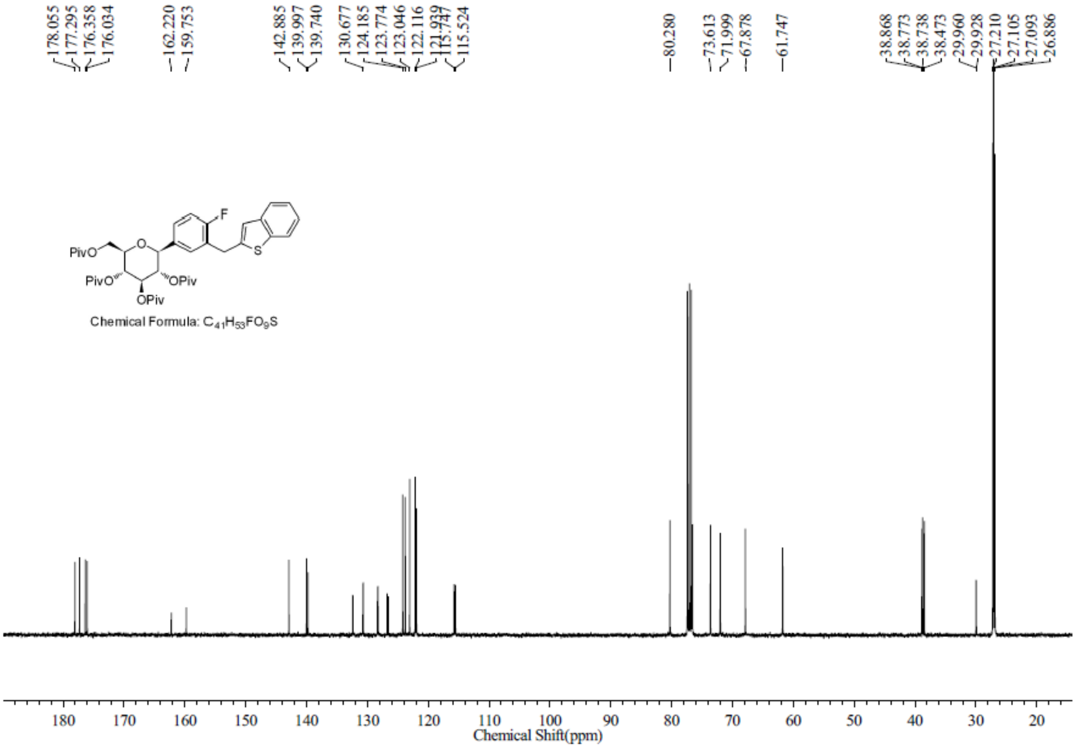
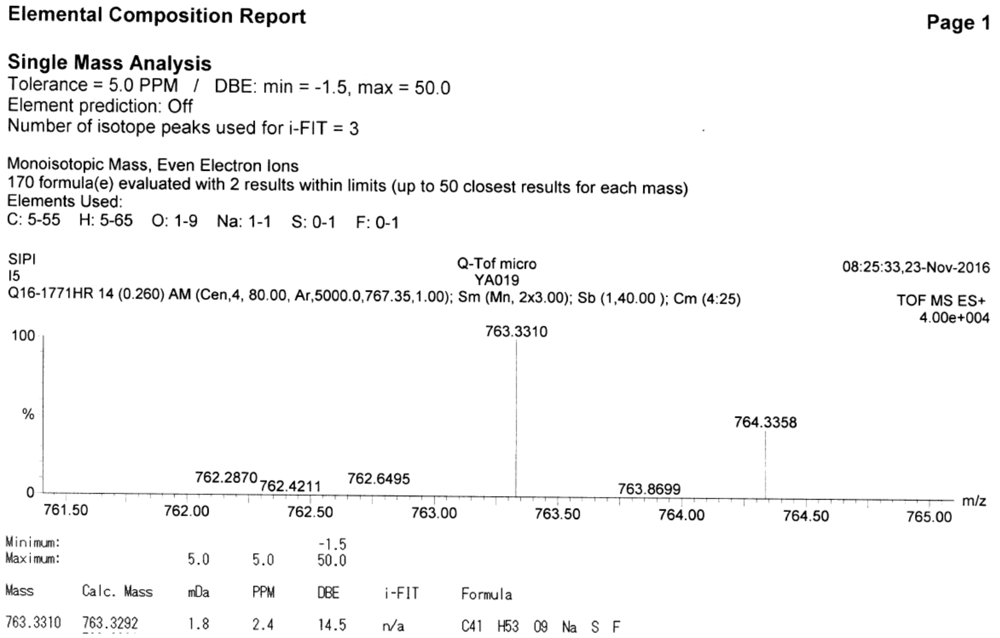


^{1}H NMR spectrum of compound **5**



^{13}C NMR spectrum of compound **5**



Elemental Composition Report

Page 1

Single Mass Analysis
Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0
Element prediction: Off
Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions
170 formula(e) evaluated with 2 results within limits (up to 50 closest results for each mass)
Elements Used:
C: 5-55 H: 5-65 O: 1-9 Na: 1-1 S: 0-1 F: 0-1

SIPI
I5
Q16-1771HR 14 (0.260) AM (Cen,4, 80.00, Ar,5000.0,767.35,1.00); Sm (Mn, 2x3.00); Sb (1,40.00); Cm (4:25)

Q-Tof micro
YA019

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TOF MS ES+
4.00e+004

```
Minimum:                              -1.5
Maximum:              5.0      5.0    50.0

Mass      Calc. Mass   mDa     PPM    DBE     i-FIT    Formula

763.3310  763.3292     1.8     2.4    14.5    n/a      C41  H53  O9  Na  S  F
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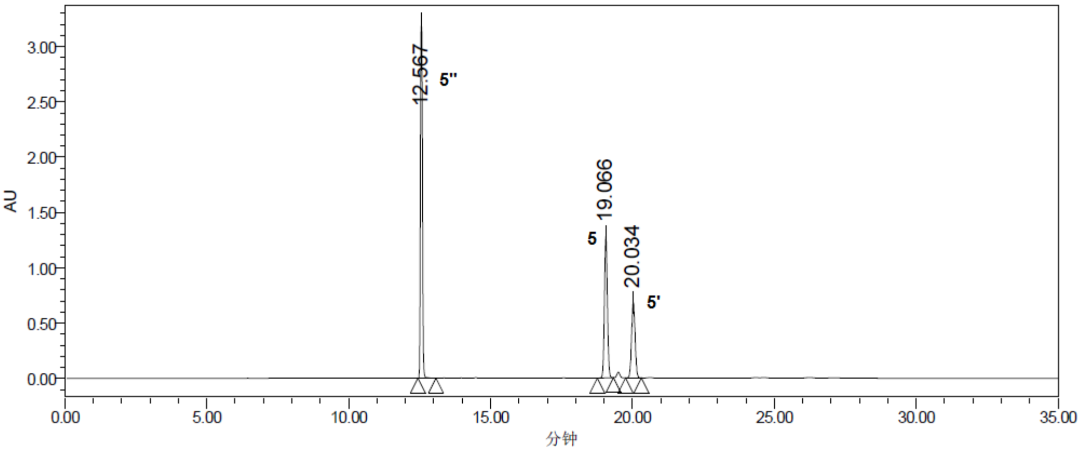
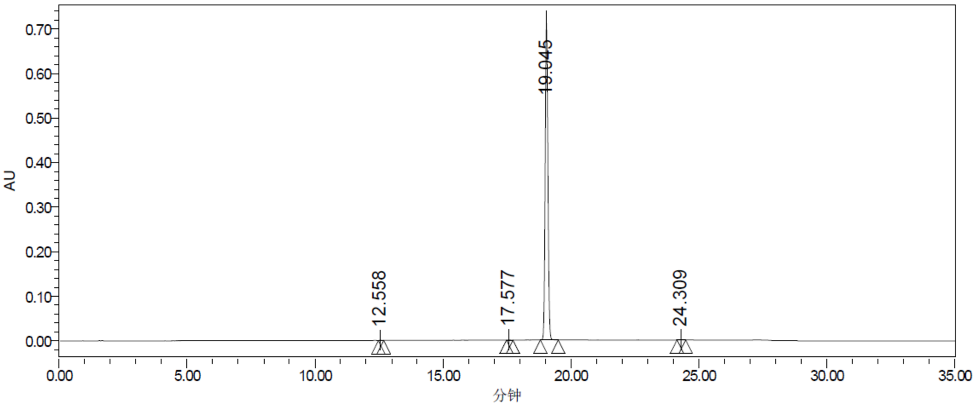
HRMS spectrum of compound **5**



峰结果

	保留时间 (分钟)	名称	面积 (微伏*秒)	高度 (微伏)	% 面积
1	12.567		16130039	3205166	51.47
2	19.066		9336482	1277501	29.79
3	20.034		5873495	681279	18.74

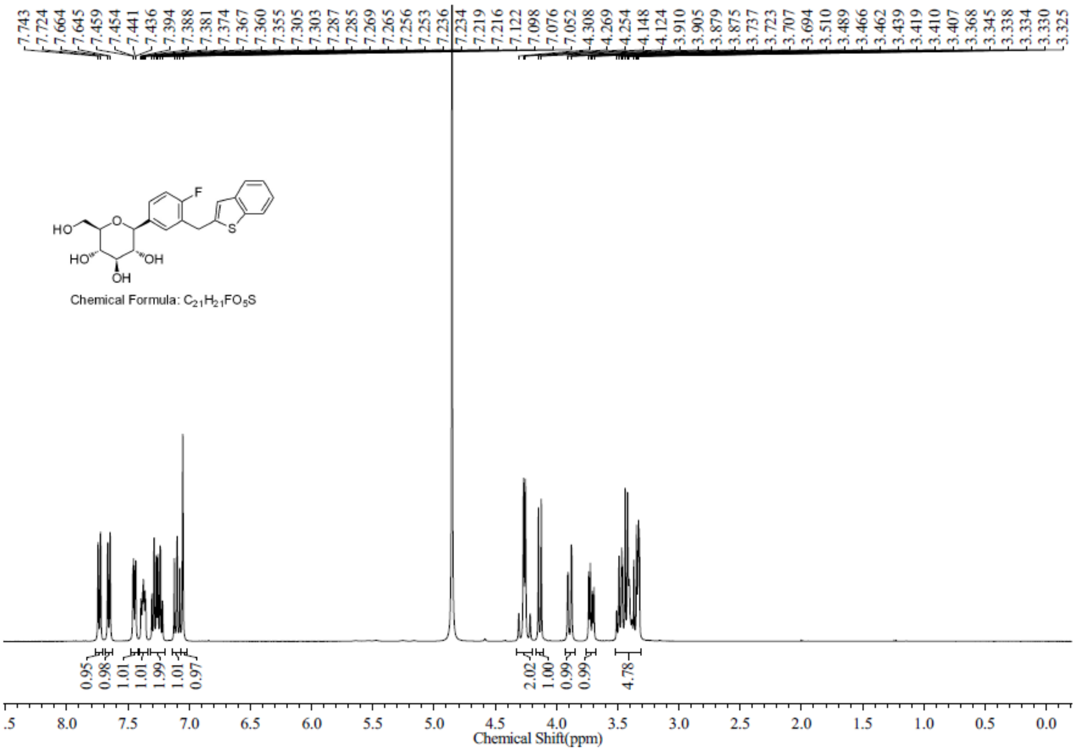
HPLC spectrum of compounds **5, 5’** and **5”**



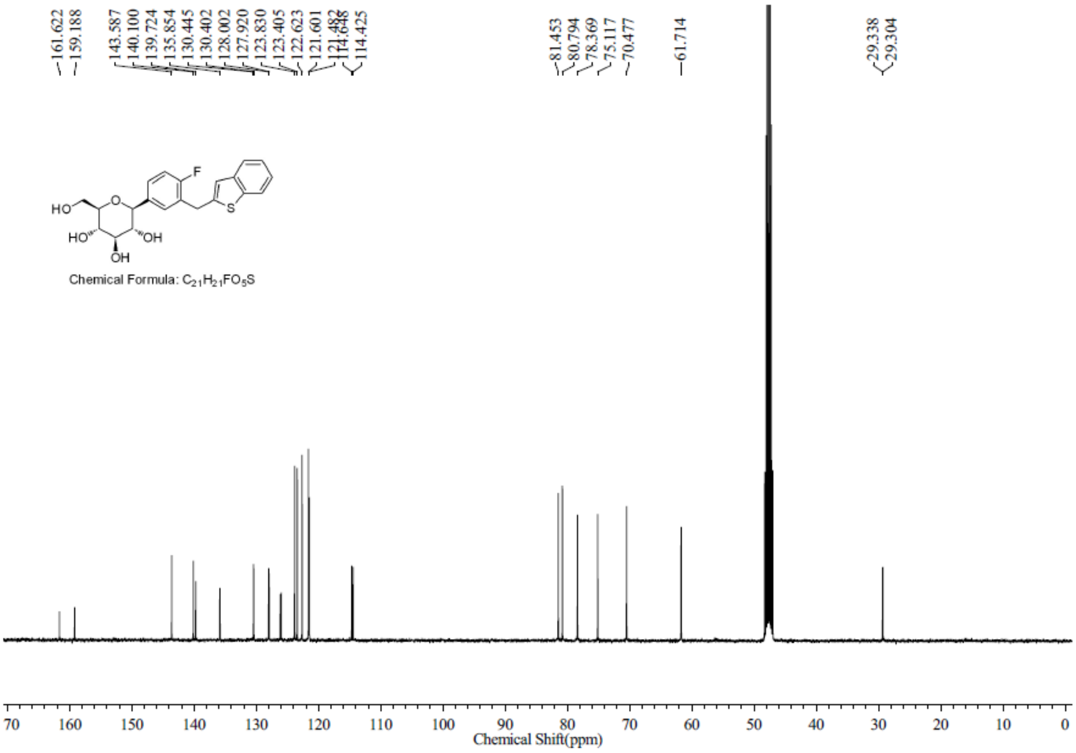
峰结果

	保留时间 (分钟)	面积 (微伏*秒)	高度 (微伏)	% 面积
1	12.558	2239	558	0.04
2	17.577	3983	744	0.08
3	19.045	5247427	715860	99.79
4	24.309	4739	454	0.09

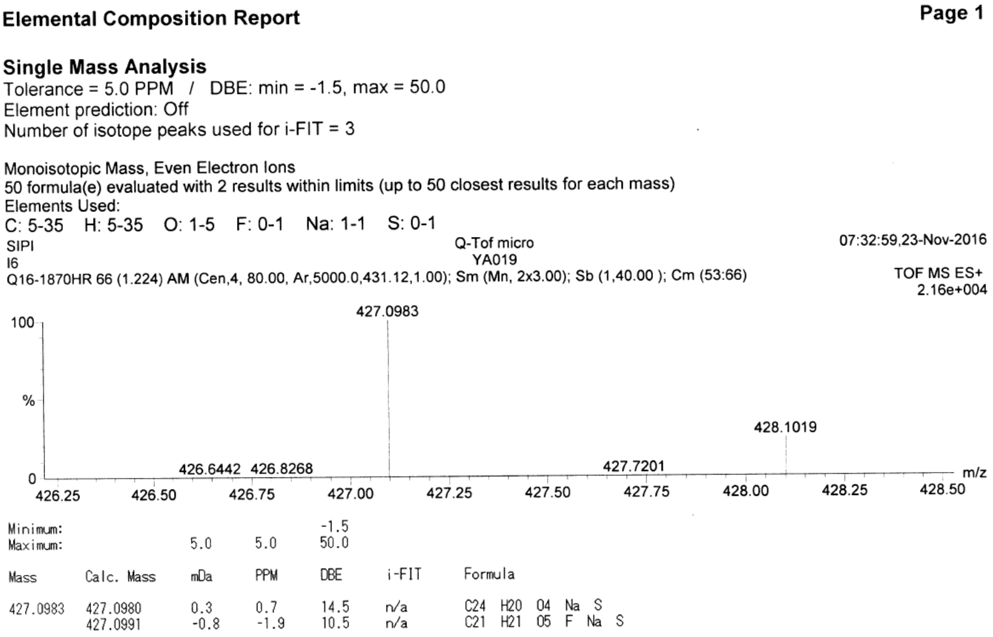
HPLC spectrum of compound **5**



^{1}H NMR spectrum of compound **6**



^{13}C NMR spectrum of compound **6**



Elemental Composition Report

Page 1

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Monoisotopic Mass, Even Electron Ions
50 formula(e) evaluated with 2 results within limits (up to 50 closest results for each mass)
Elements Used:
C: 5-35 H: 5-35 O: 1-5 F: 0-1 Na: 1-1 S: 0-1

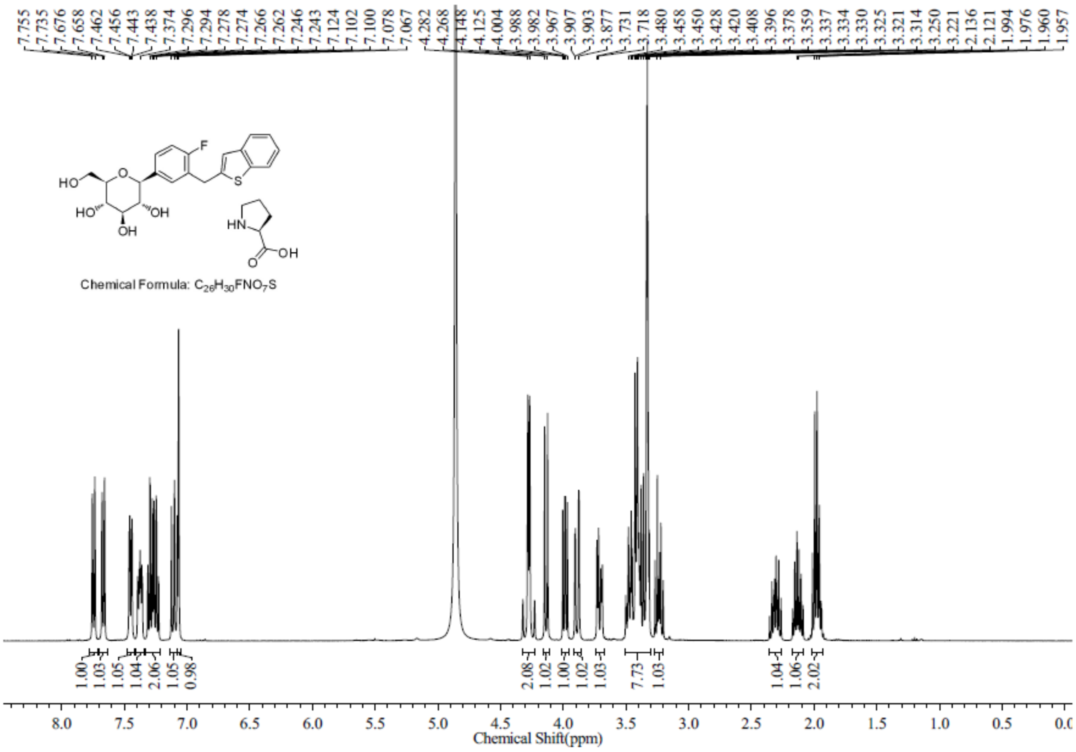
SIPI
I6
Q16-1870HR 66 (1.224) AM (Cen,4, 80.00, Ar,5000.0,431.12,1.00); Sm (Mn, 2x3.00); Sb (1,40.00); Cm (53:66)

Q-Tof micro
YA019

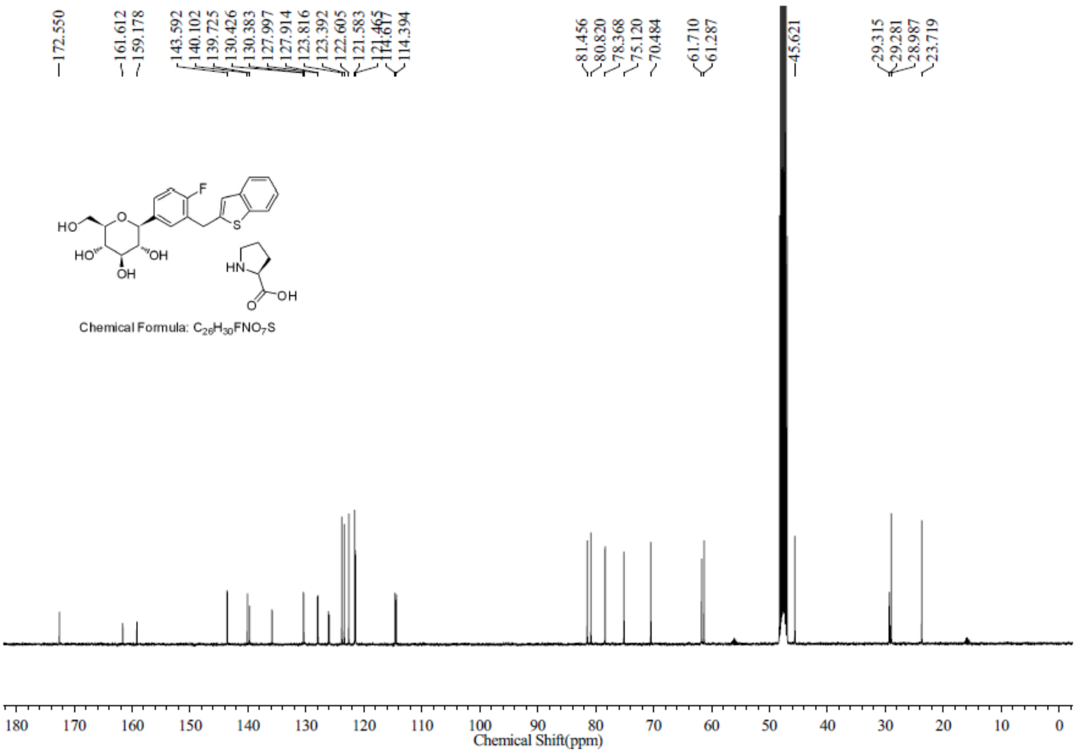
07:32:59,23-Nov-2016
TOF MS ES+
2.16e+004

Minimum:				-1.5		
Maximum:		5.0	5.0	50.0		
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
427.0983	427.0980	0.3	0.7	14.5	n/a	C24 H20 O4 Na S
	427.0991	-0.8	-1.9	10.5	n/a	C21 H21 O5 F Na S

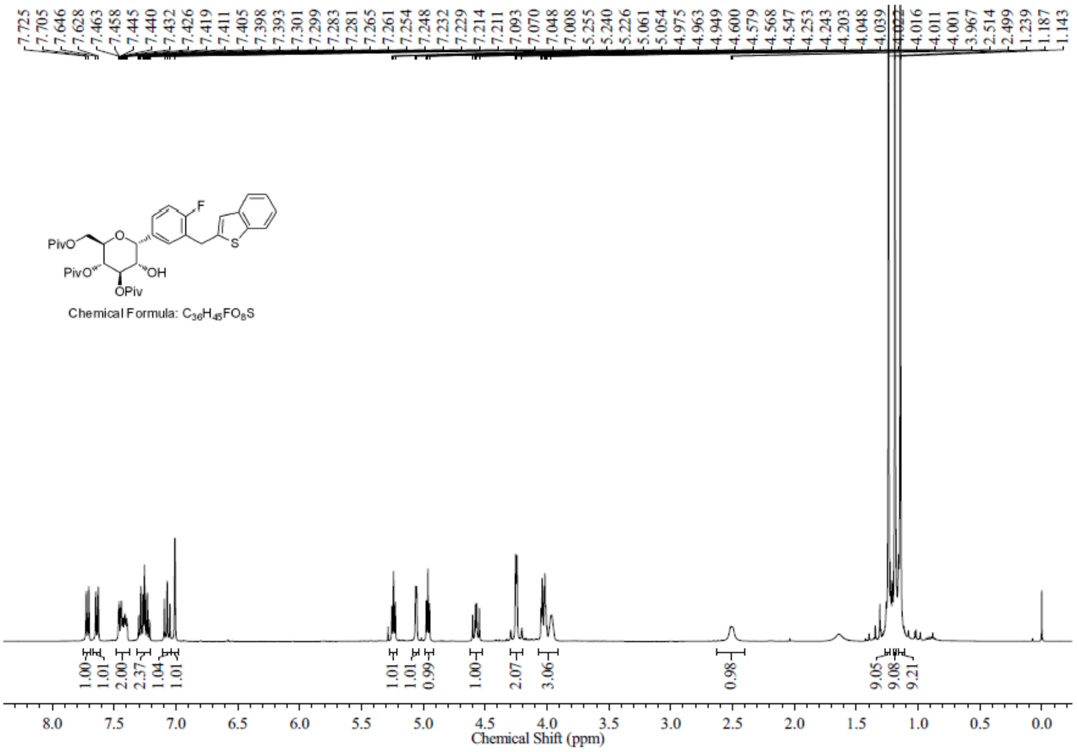
HRMS spectrum of compound **6**



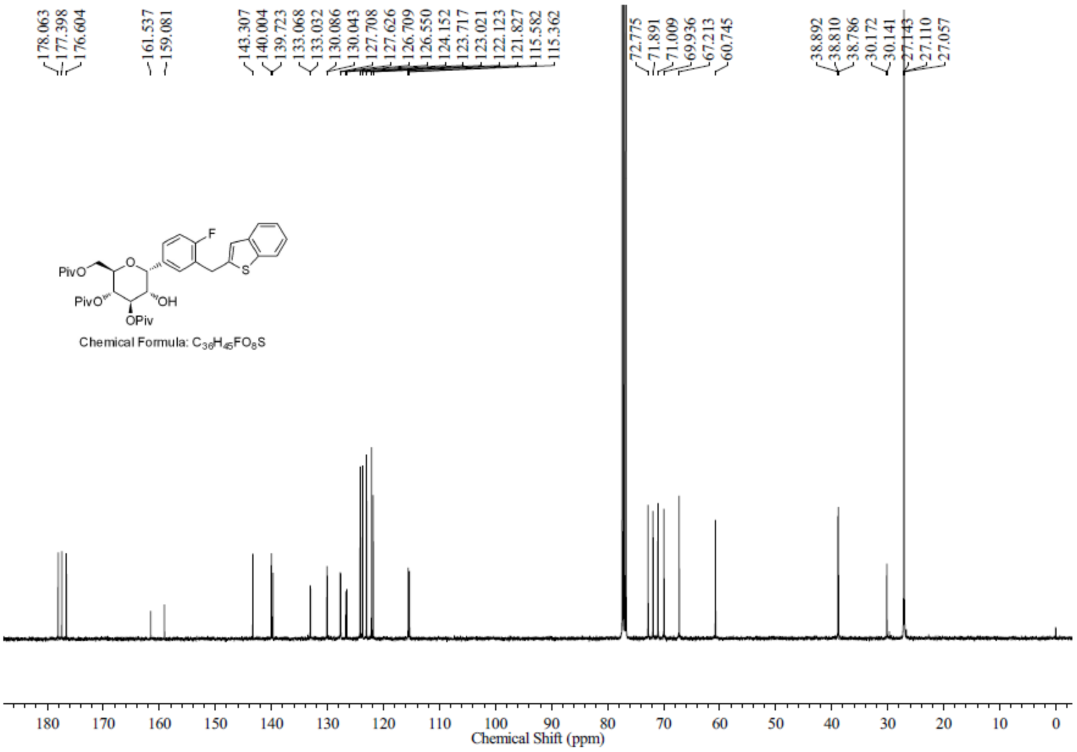
^{1}H NMR spectrum of compound **1**



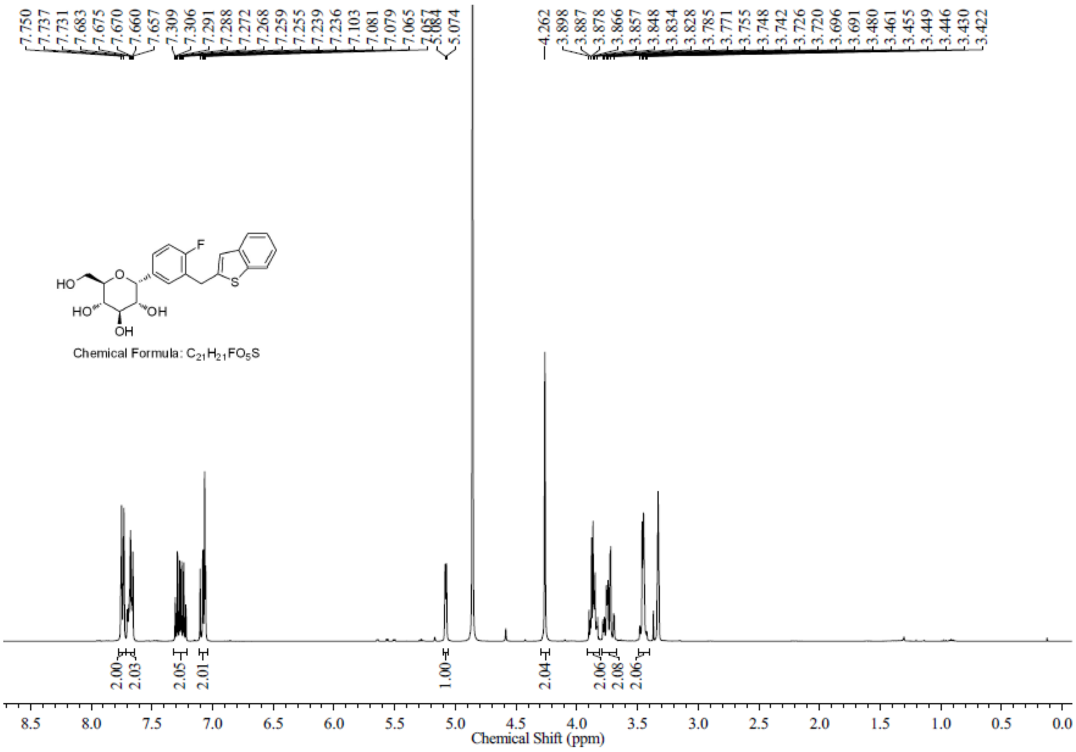
^{13}C NMR spectrum of compound **1**



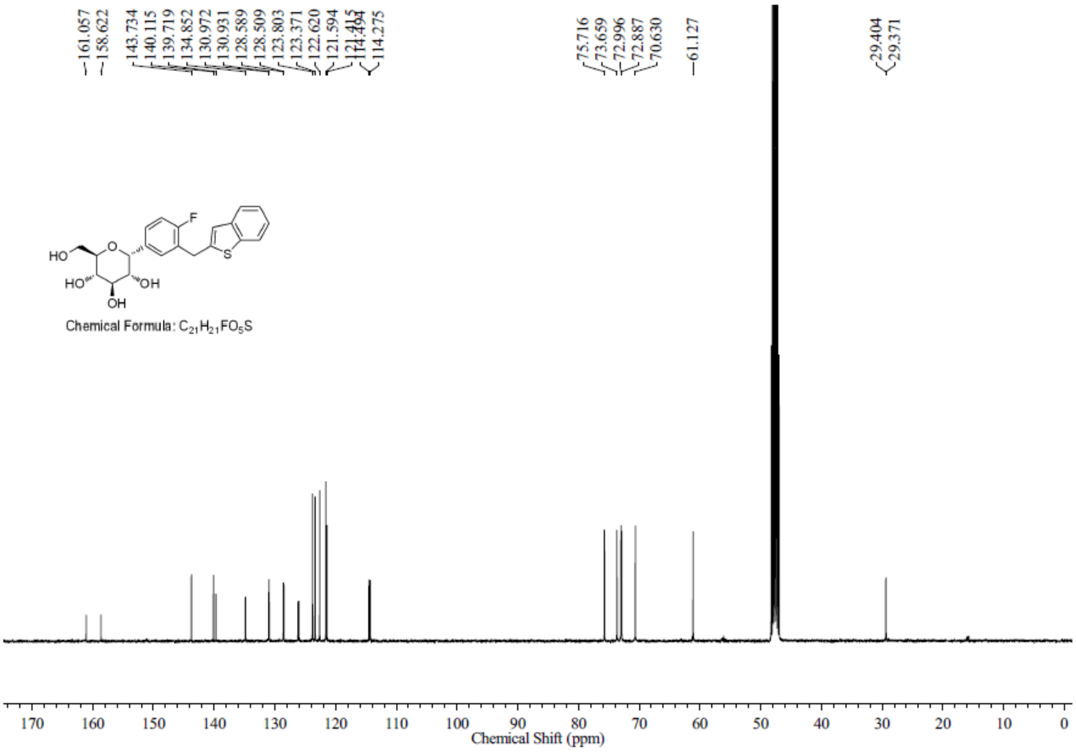
^{1}H NMR spectrum of compound **8**



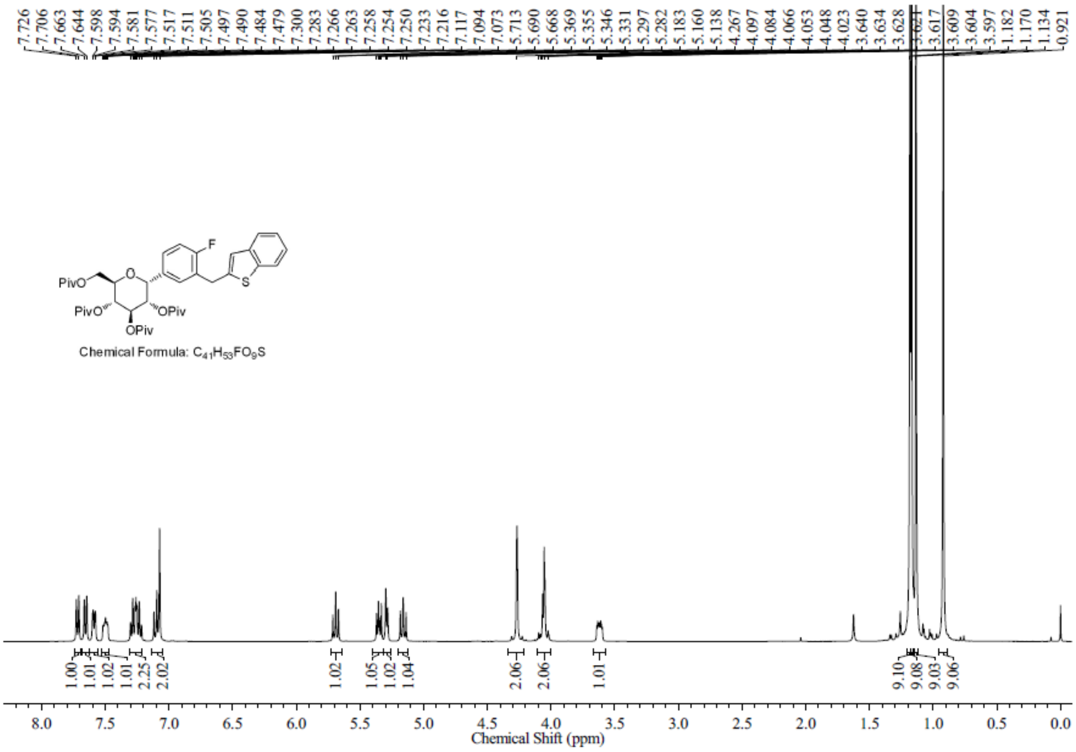
^{13}C NMR spectrum of compound **8**



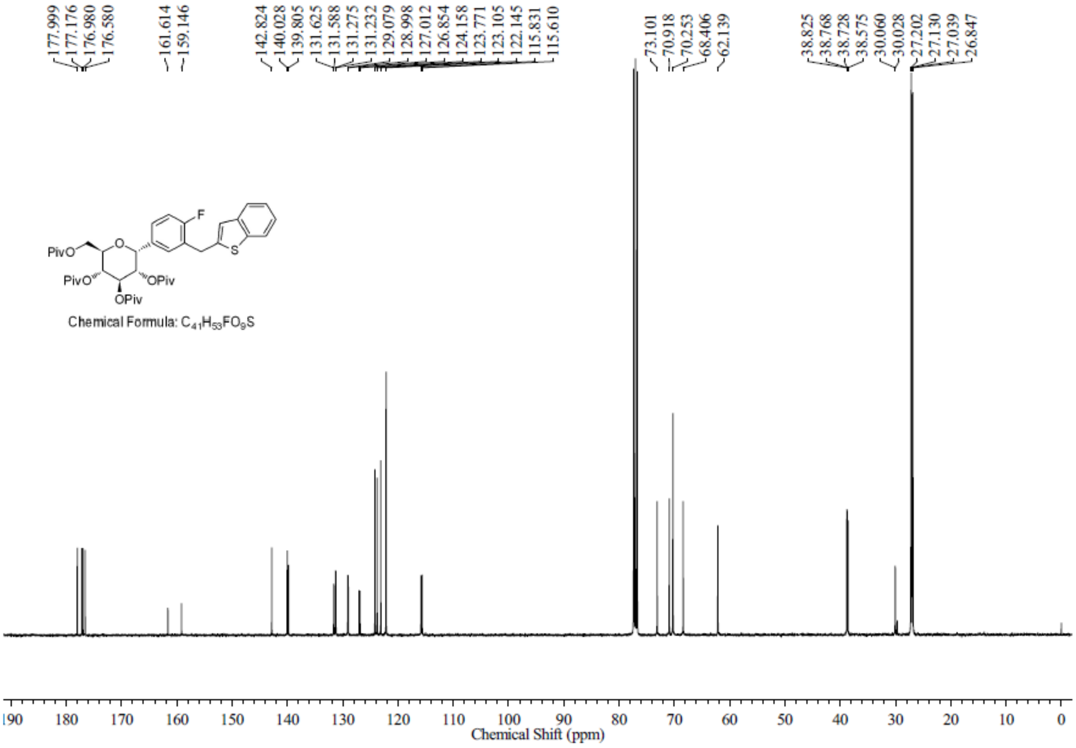
^{1}H NMR spectrum of compound **6’**



^{13}C NMR spectrum of compound **6’**



^{1}H NMR spectrum of compound **5’**



^{13}C NMR spectrum of compound **5’**