

Supporting information 2 for

## Tetra-Arylborate Lipophilic Anions as Targeting Groups

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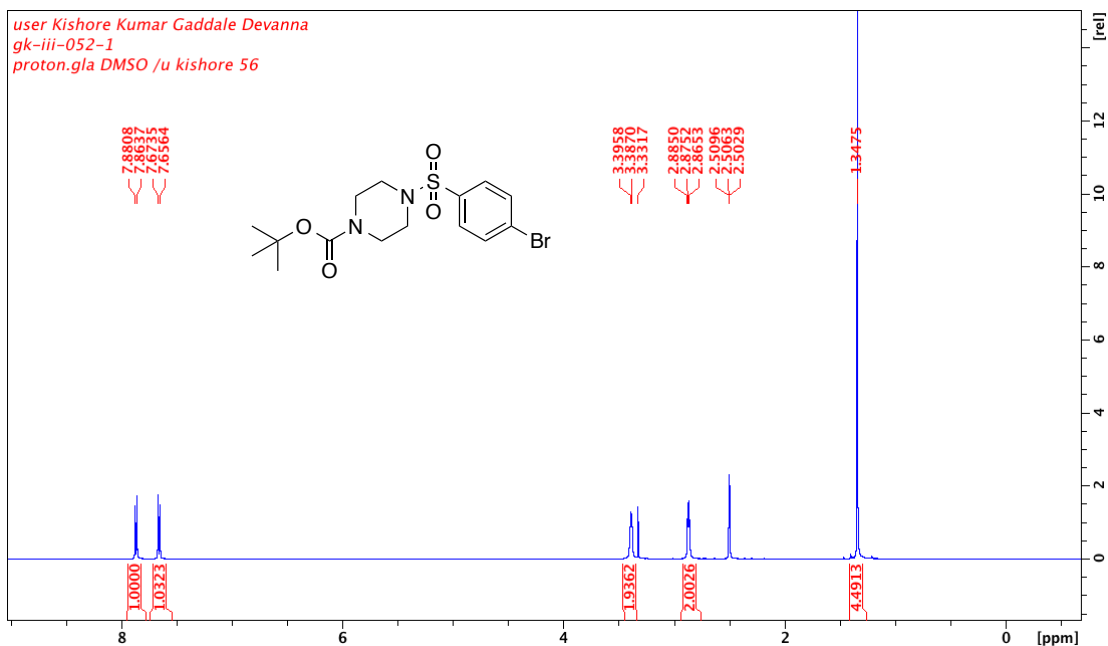
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### Contents of Supplementary Information 2: NMR Spectra of

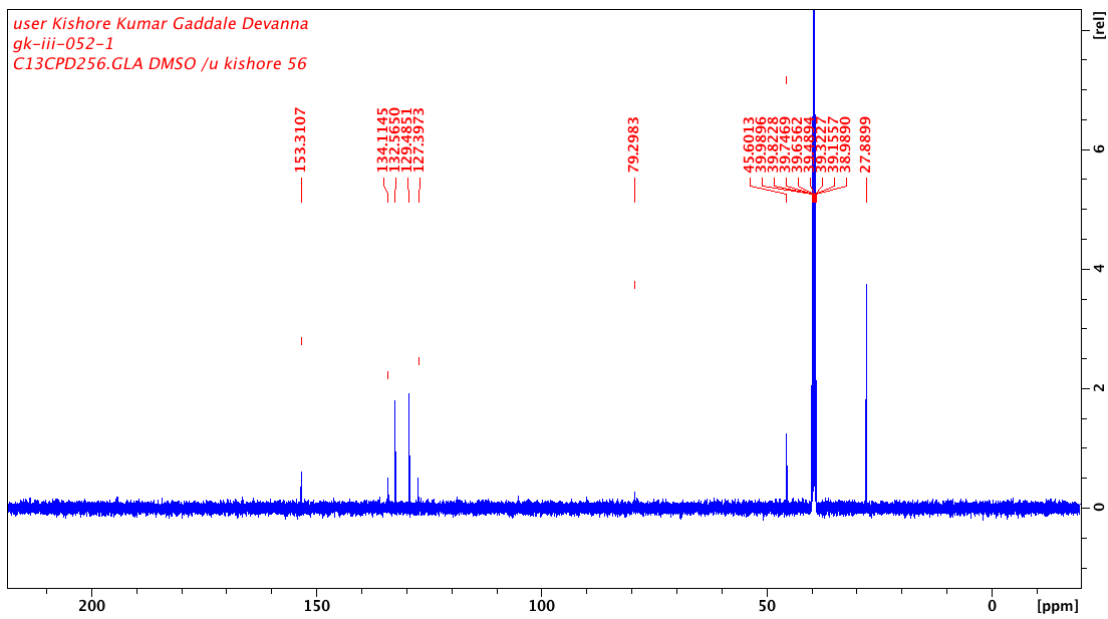
|   |     |
|---|-----|
| <i>Tert</i> -butyl 4-(4'-bromophenylsulfonyl)piperazine-1-carboxylate <b>1</b>                      | S2  |
| Methyl 4-(4'-bromophenylsulfonyl)piperazine-1-carboxylate <b>2</b>                                  | S3  |
| Potassium {4-[4'-(methoxycarbonyl)piperazin-1'-ylsulfonyl]phenyl} trifluoroborate <b>3</b>          | S4  |
| Tetrabutylammonium {4-[4'-(methoxycarbonyl)piperazin-1'-ylsulfonyl]phenyl} triphenylborate <b>4</b> | S6  |
| Tetrabutylammonium [4-(piperazin-1'-ylsulfonyl)phenyl] triphenylborate <b>5</b>                     | S8  |
| TPBE (tetrabutylammonium salt)  | S10 |
| TPBE (sodium salt)  | S12 |
| TPBM (sodium salt)  | S14 |
| TPBBODIPY (sodium salt)   | S15 |
| TPBCoumarin (sodium salt)   | S17 |

# Tert-butyl 4-(4'-bromophenylsulfonyl)piperazine-1-carboxylate 1

## <sup>1</sup>H NMR spectrum

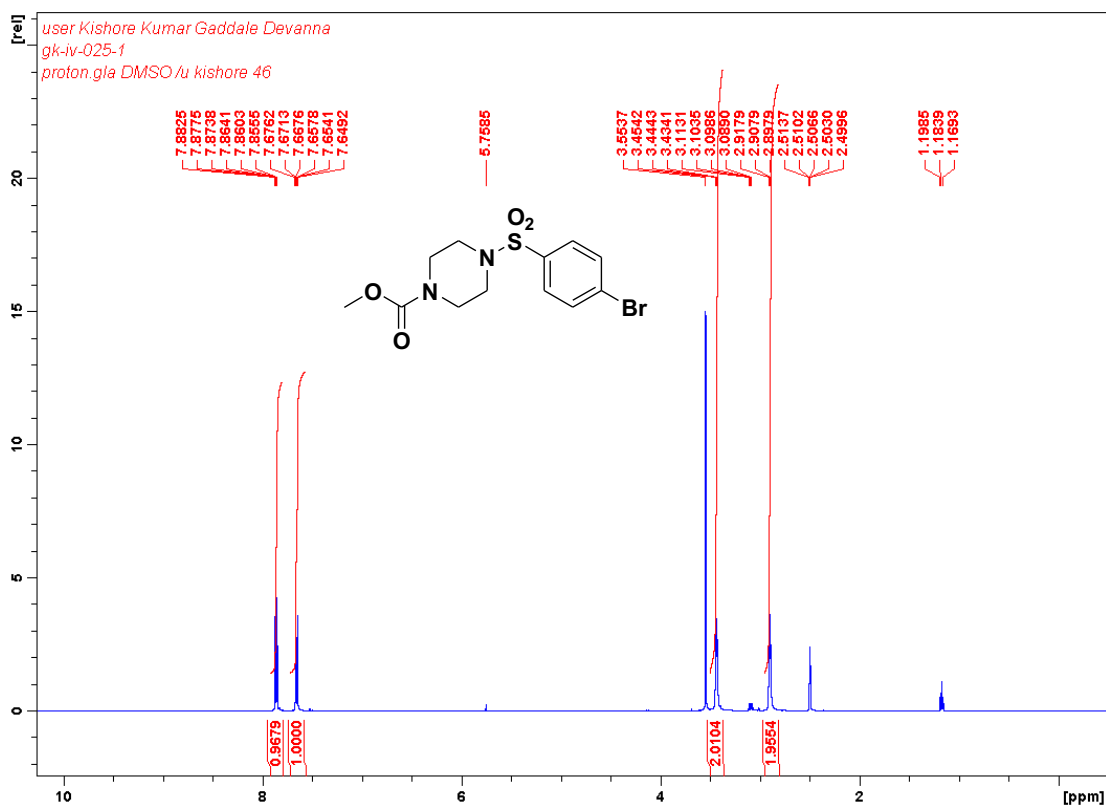


## <sup>13</sup>C NMR spectrum

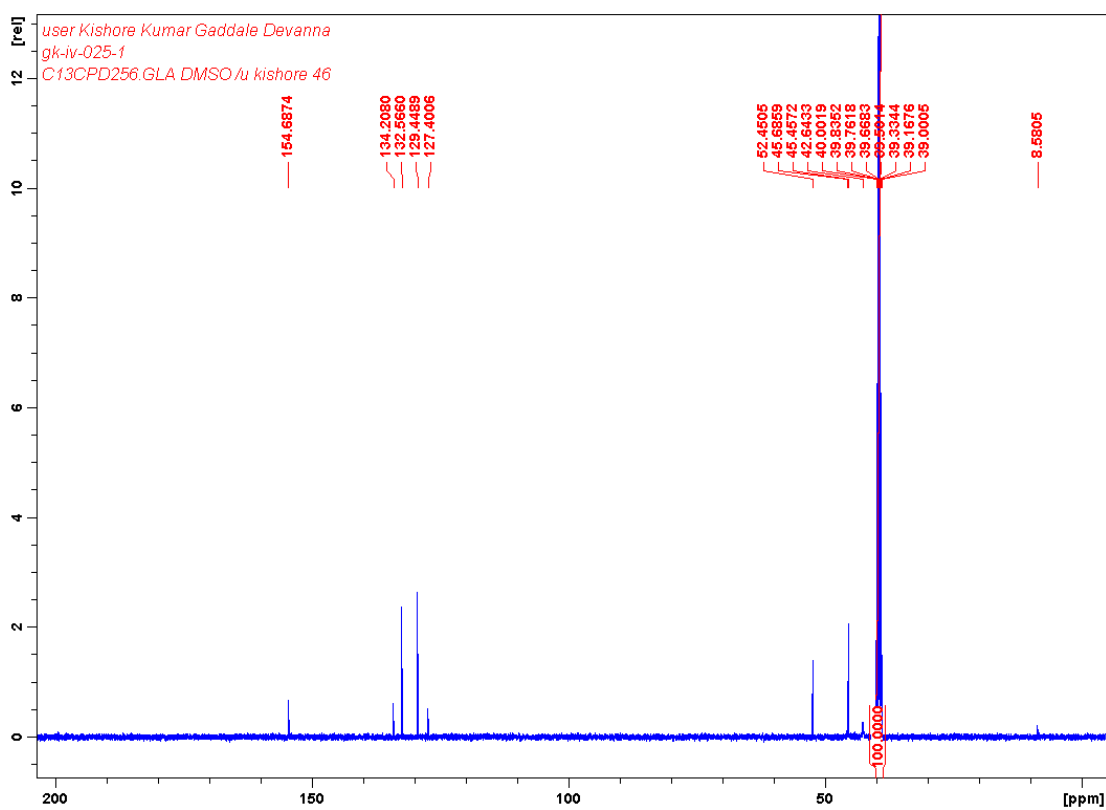


# Methyl 4-(4'-bromophenylsulfonyl)piperazine-1-carboxylate 2

## <sup>1</sup>H NMR spectrum

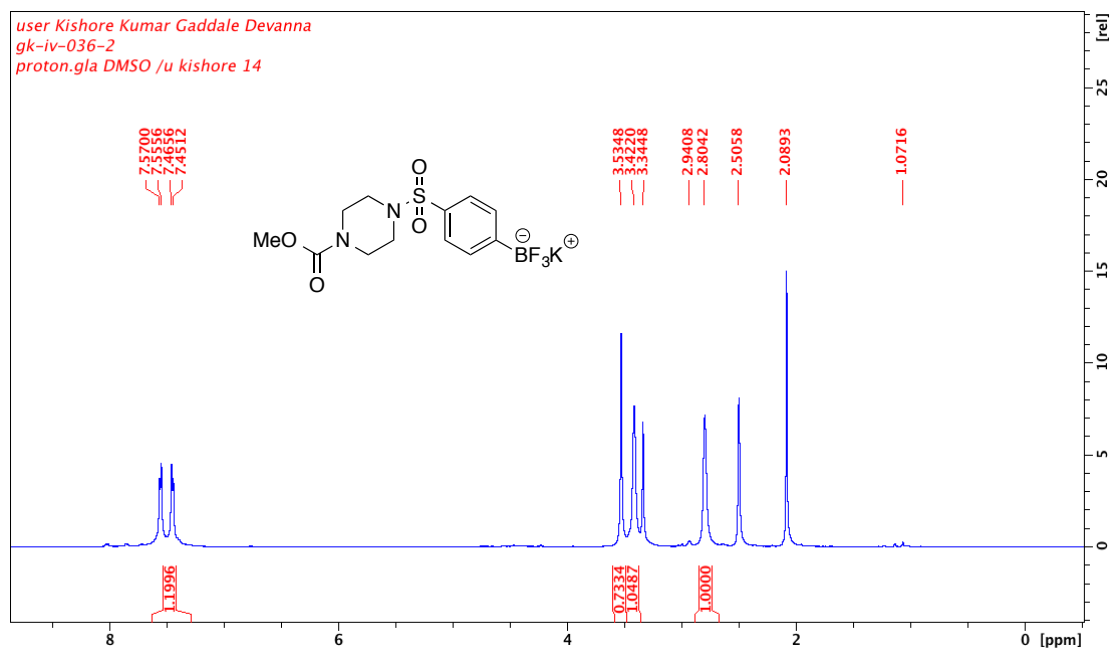


## <sup>13</sup>C NMR spectrum

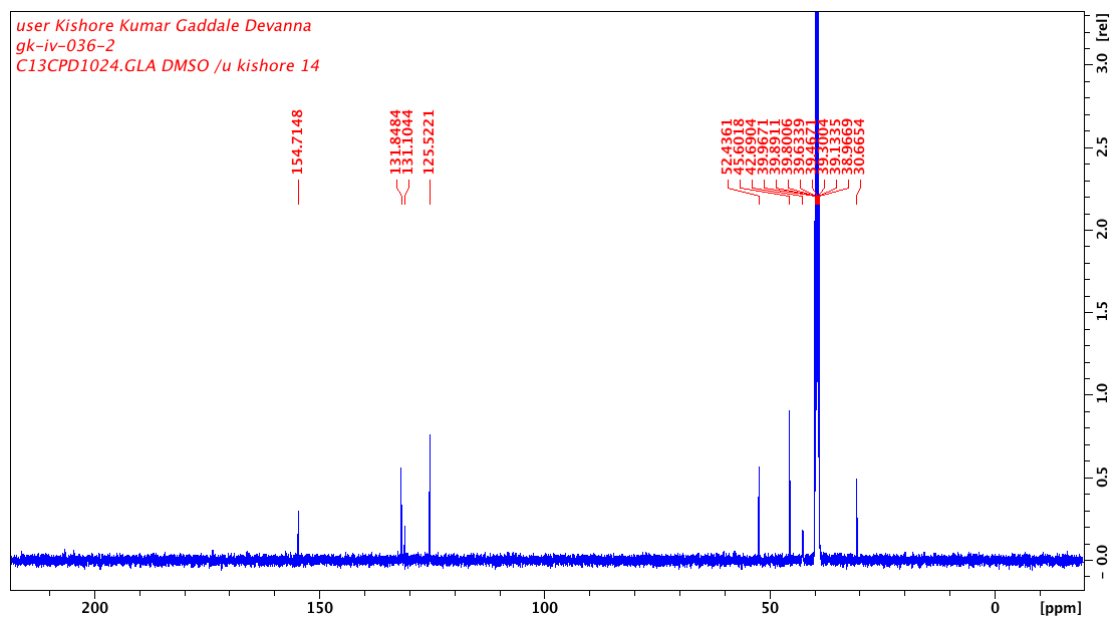


# Potassium {4-[4'-(methoxycarbonyl)piperazin-1'-ylsulfonyl]phenyl}trifluoroborate 3

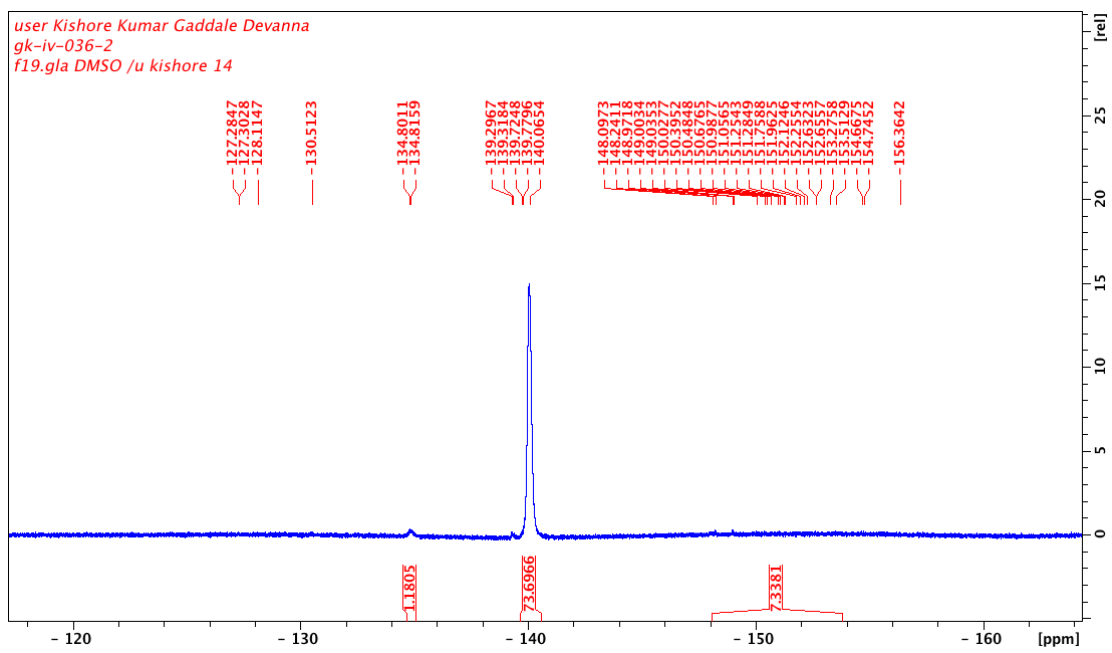
## <sup>1</sup>H NMR spectrum



## <sup>13</sup>C NMR spectrum



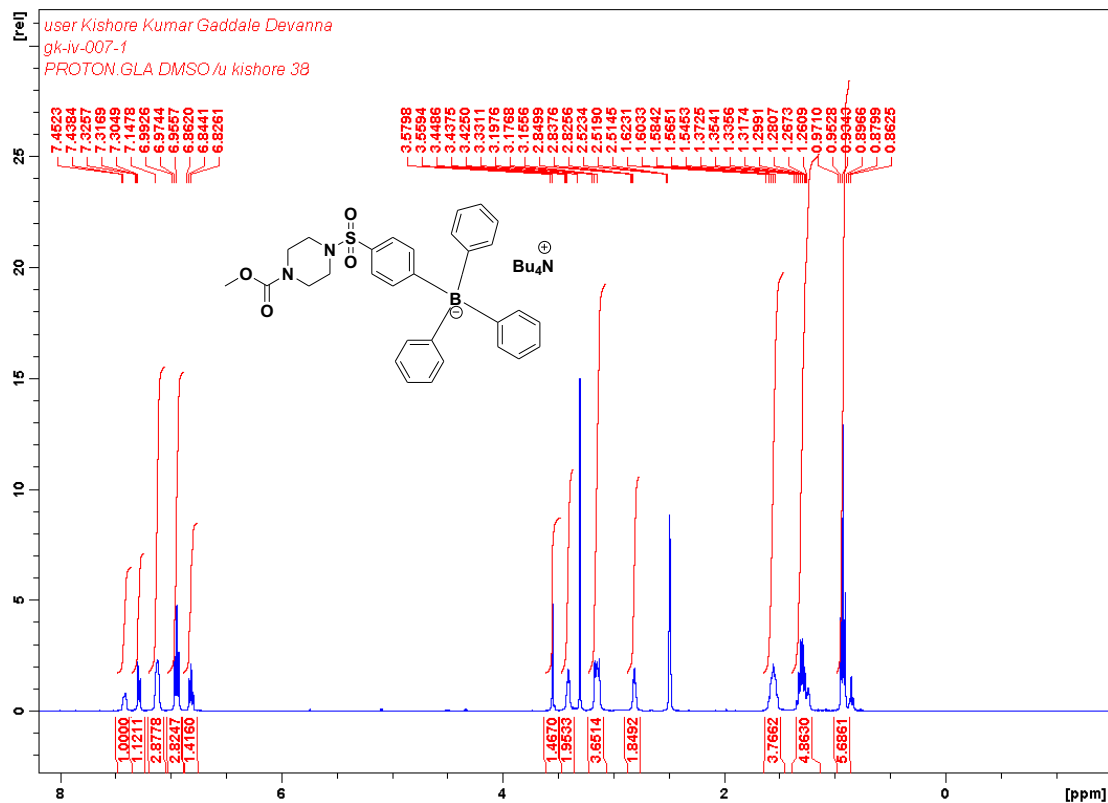
# <sup>19</sup>F NMR spectrum



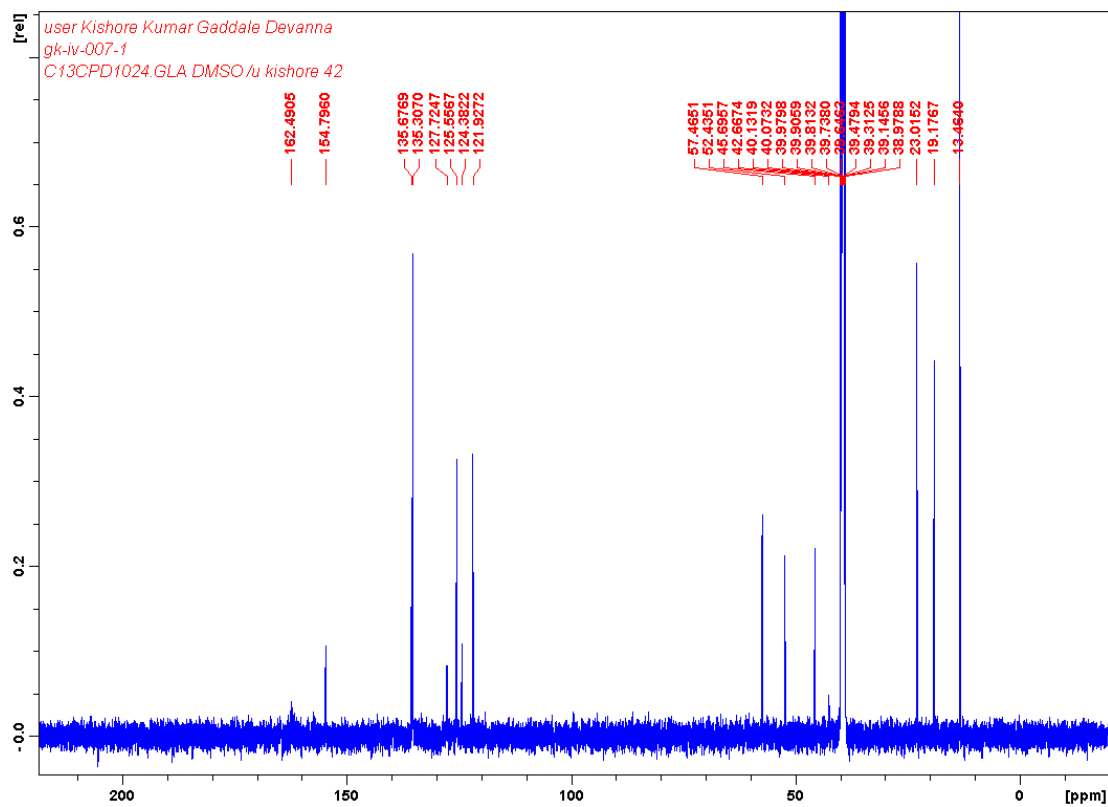
# Tetrabutylammonium

## {4-[4'-(methoxycarbonyl)piperazin-1'-ylsulfonyl]phenyl}triphenylborate 4

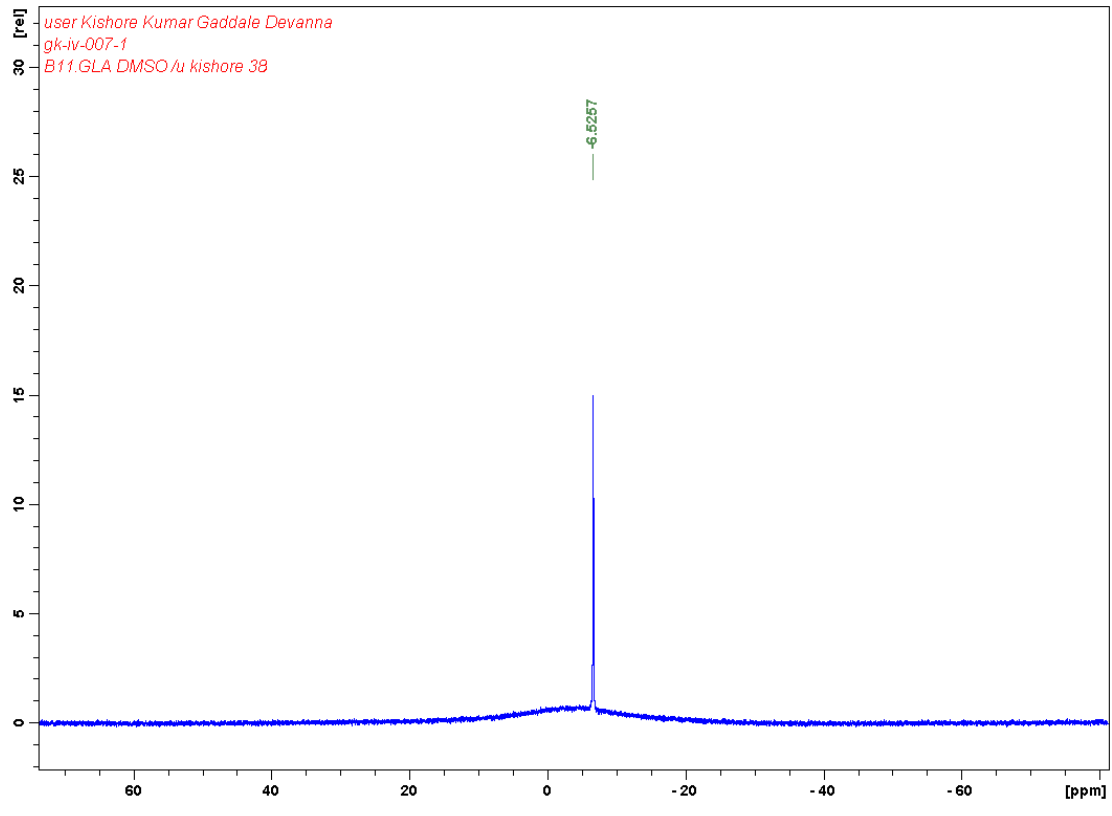
### <sup>1</sup>H NMR spectrum



### <sup>13</sup>C NMR spectrum

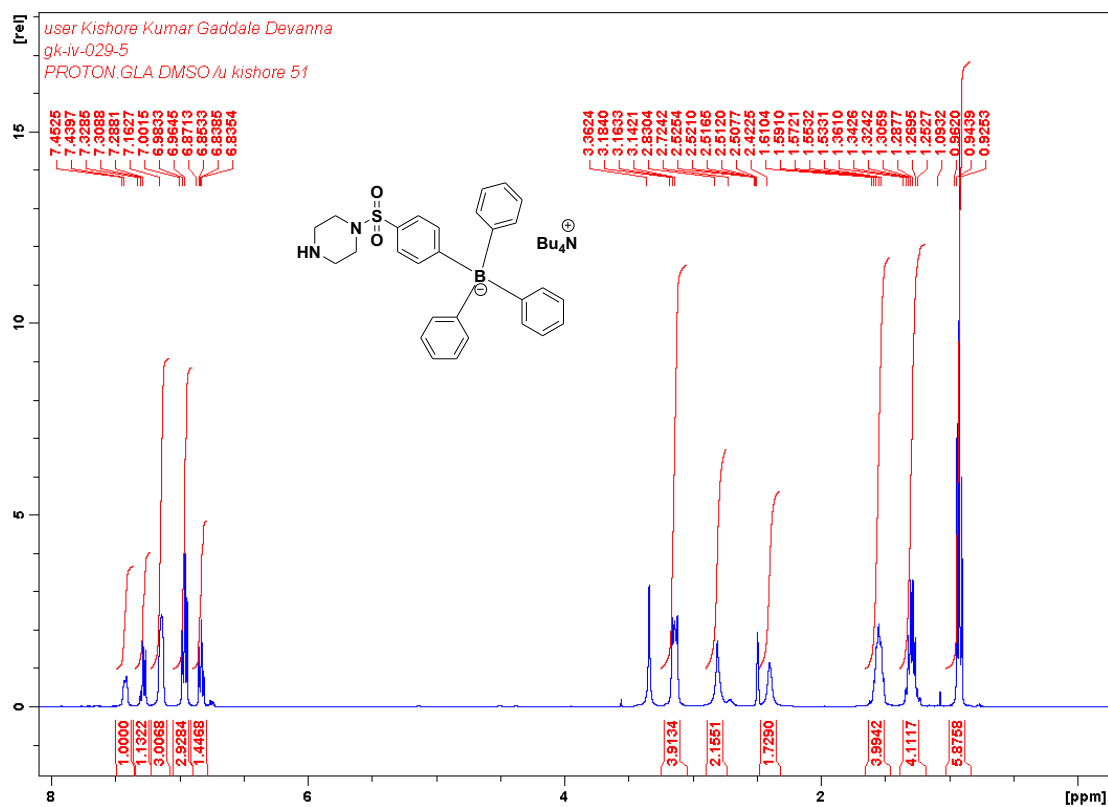


# $^{11}\text{B}$ NMR spectrum

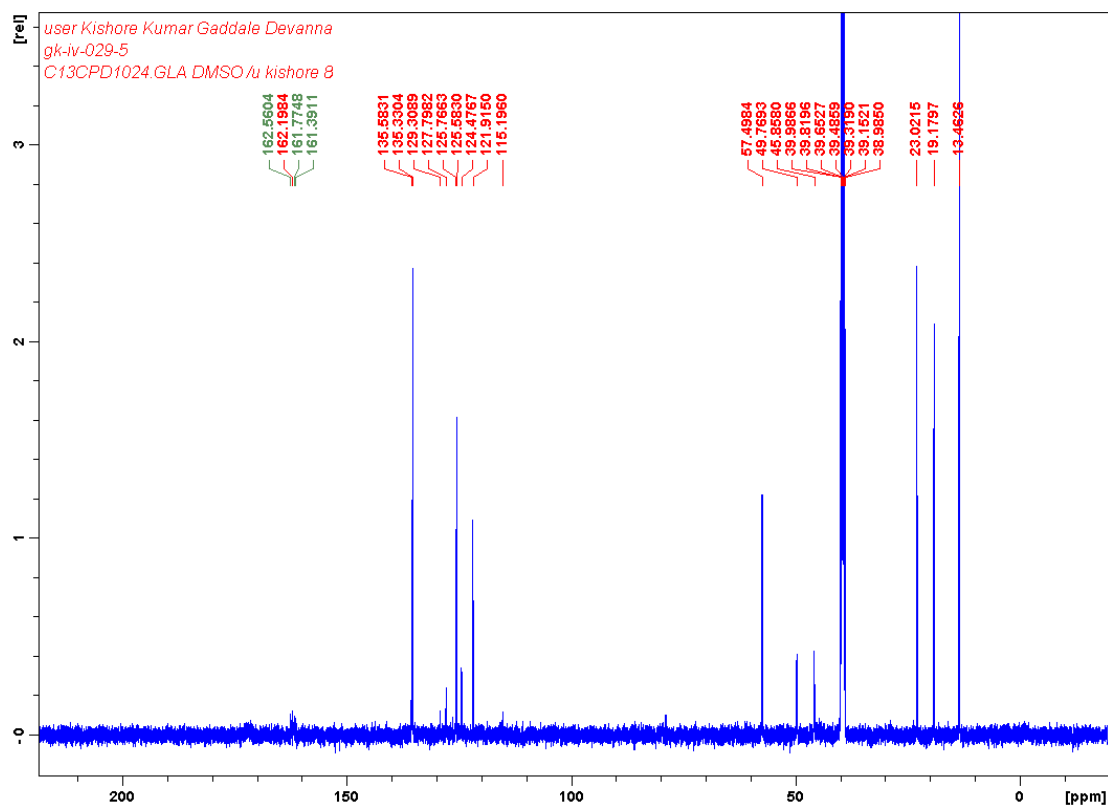


# Tetrabutylammonium [4-(piperazin-1'-ylsulfonyl)phenyl]triphenylborate 5

## <sup>1</sup>H NMR spectrum

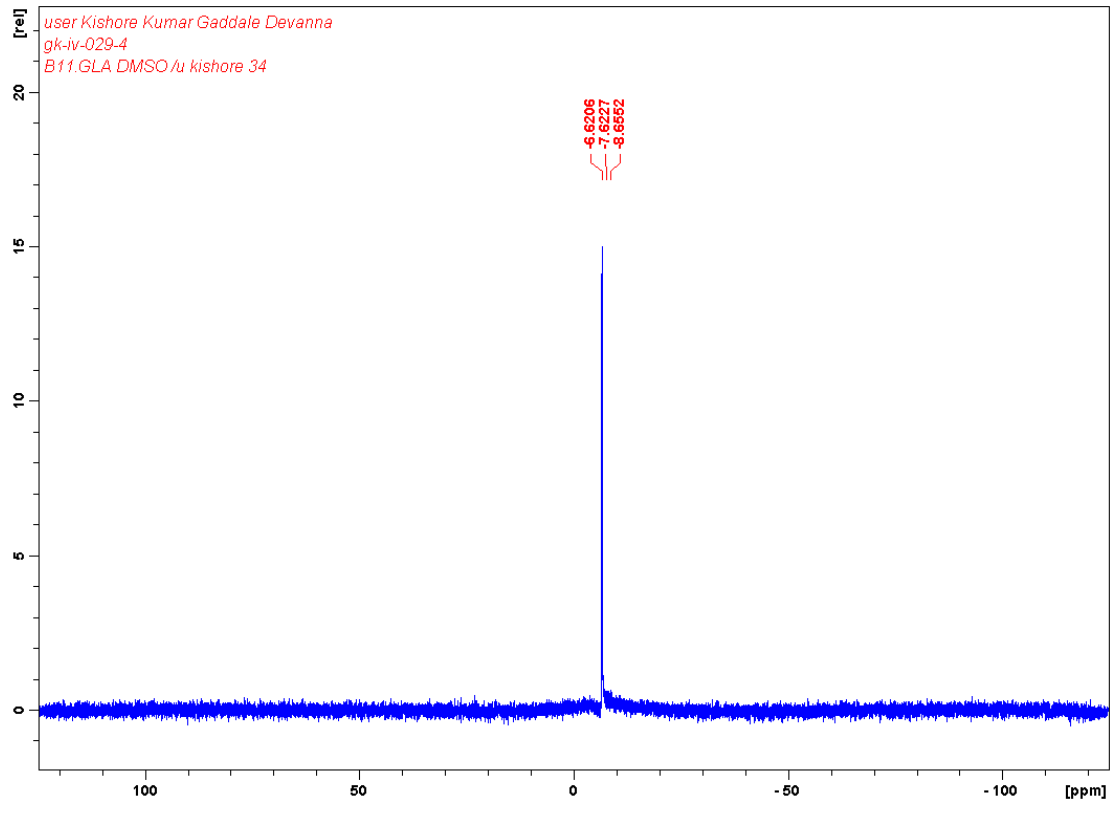


## <sup>13</sup>C NMR spectrum

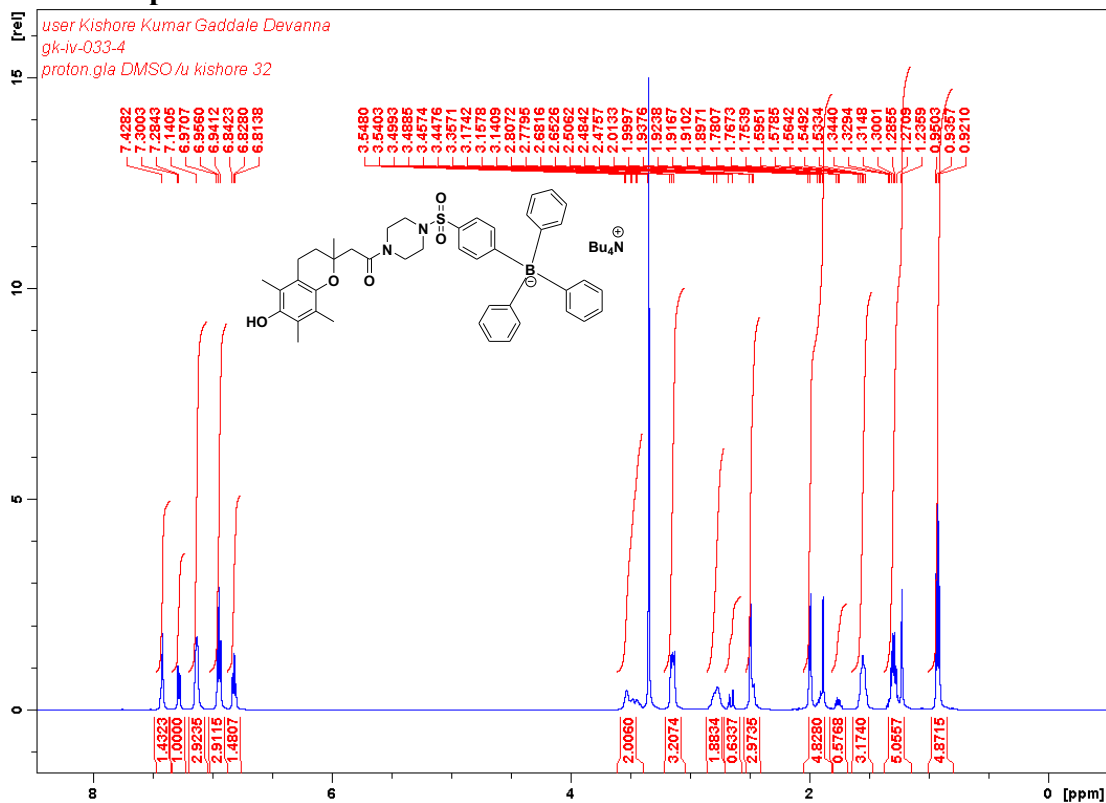




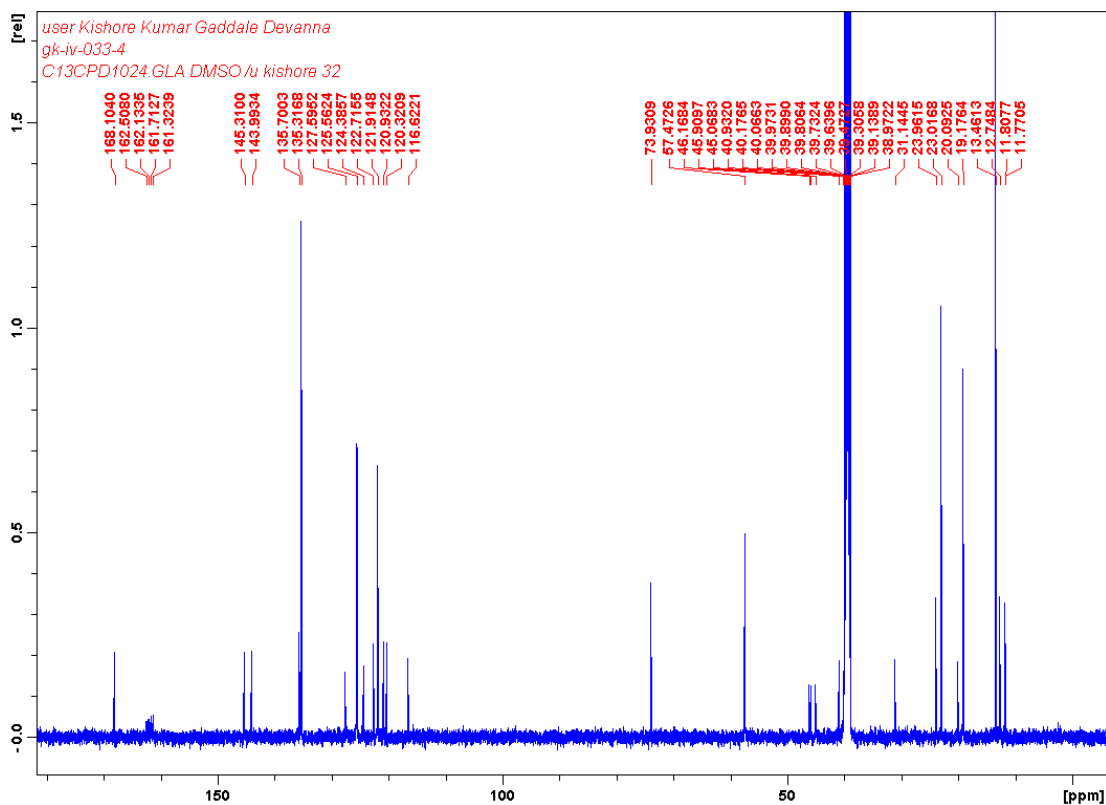
# $^{11}\text{B}$ NMR spectrum



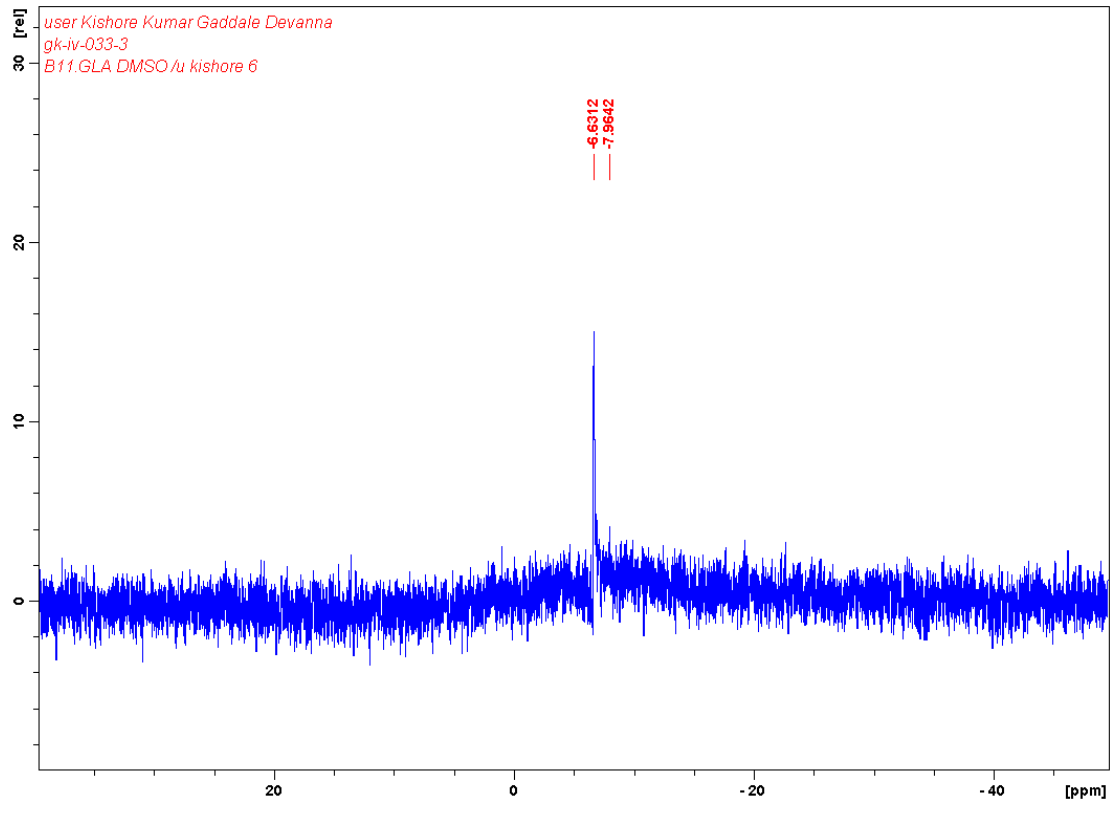
**Tetrabutylammonium (4-{4'-[2''-(6'''-hydroxy-2''',5''',7''',8'''-tetramethylchroman-2''')-yl]acetyl}piperazin-1'-ylsulfonyl}phenyl)triphenylborate, TPBE (tetrabutylammonium salt)**  
**<sup>1</sup>H NMR spectrum**



**<sup>13</sup>C NMR spectrum**

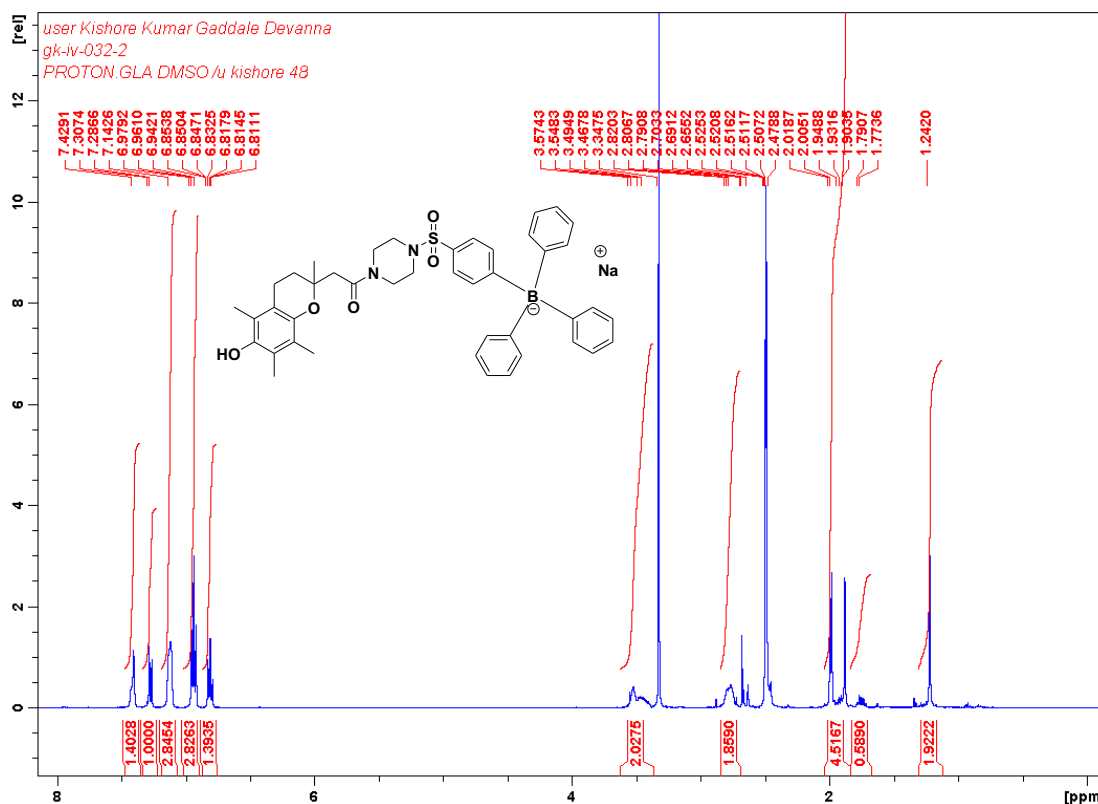


# $^{11}\text{B}$ NMR spectrum

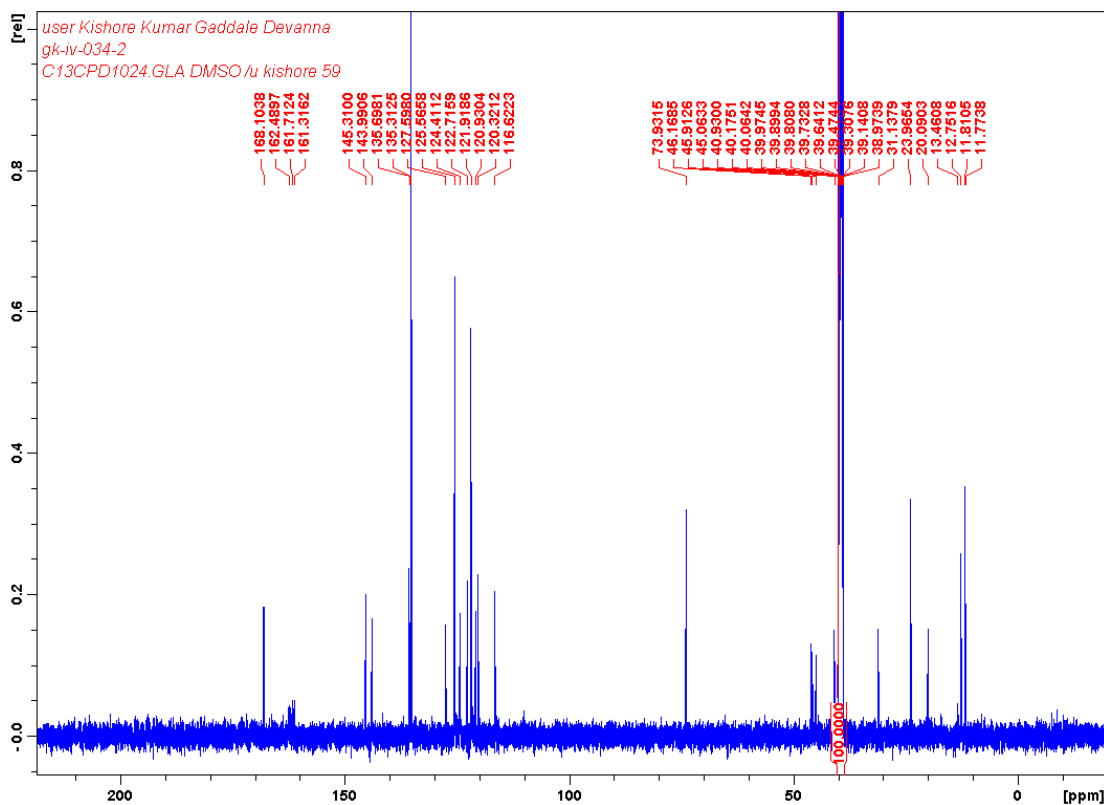


**Sodium (4-{4'-[2''-(6'''-hydroxy-2''',5''',7''',8'''-tetramethylchroman-2''-yl)acetyl]piperazin-1'-ylsulfonyl}phenyl)triphenylborate, TPBE (sodium salt)**

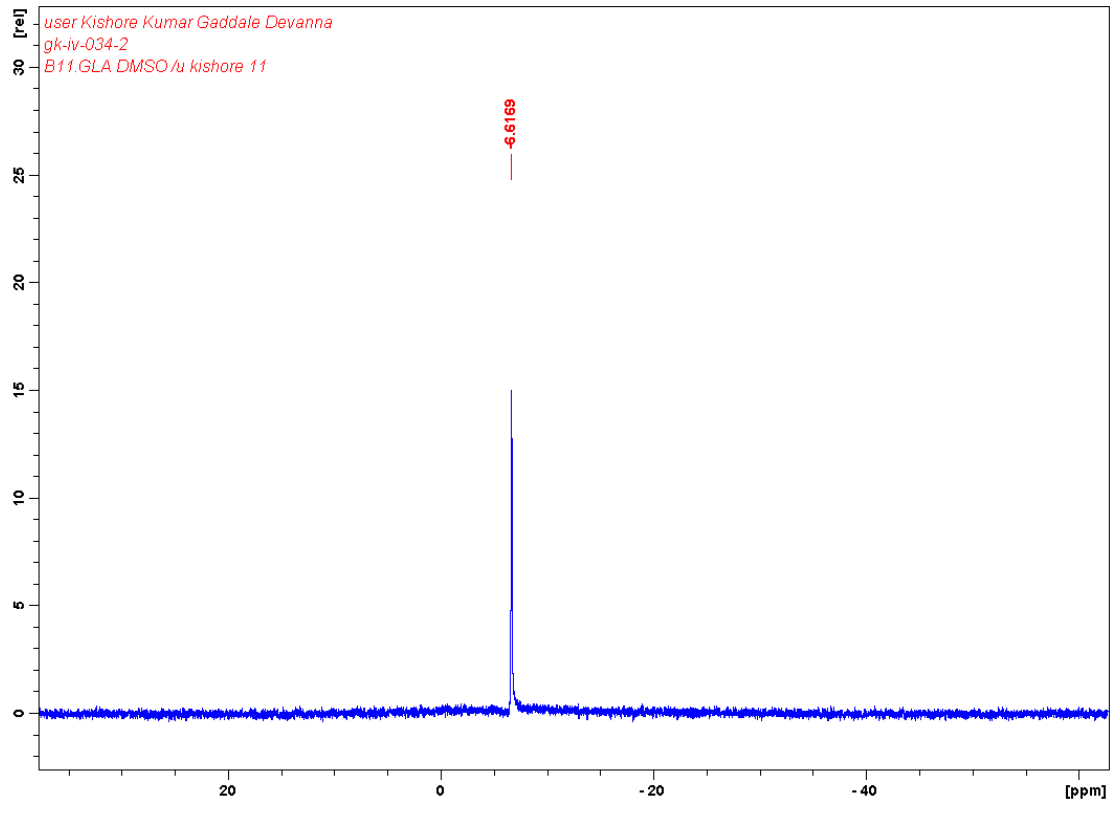
**<sup>1</sup>H NMR spectrum**



**<sup>13</sup>C NMR spectrum**

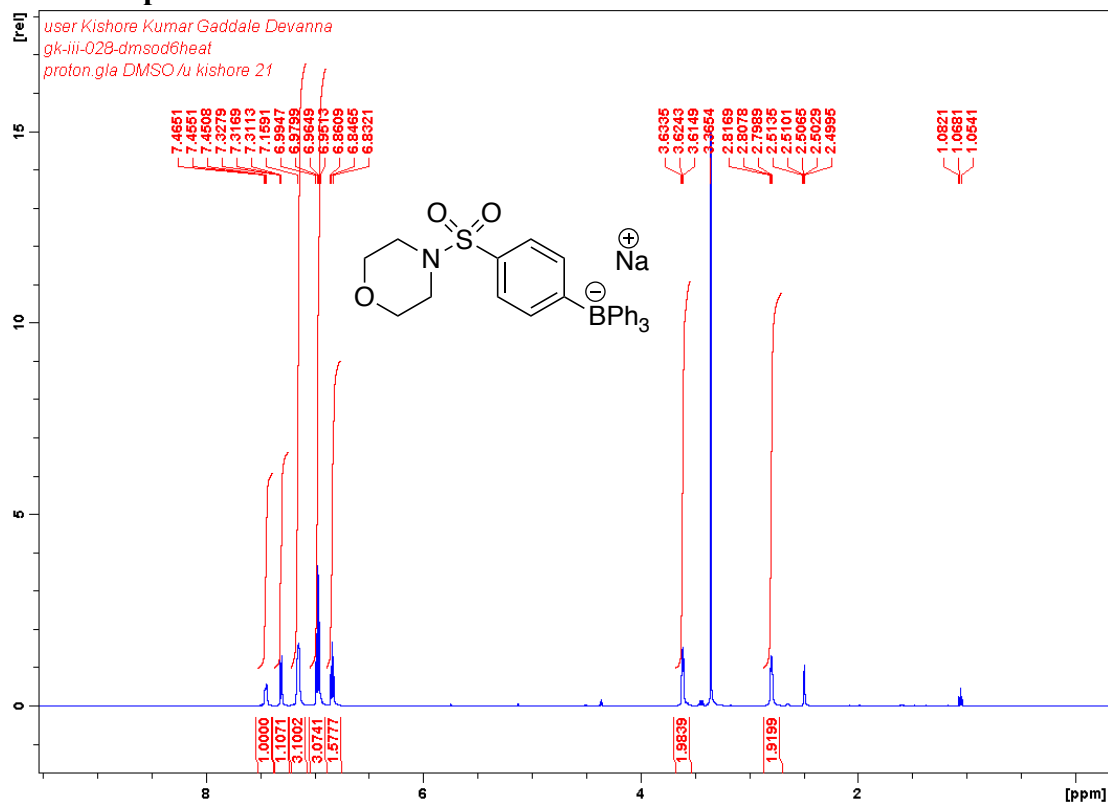


# $^{11}\text{B}$ NMR spectrum

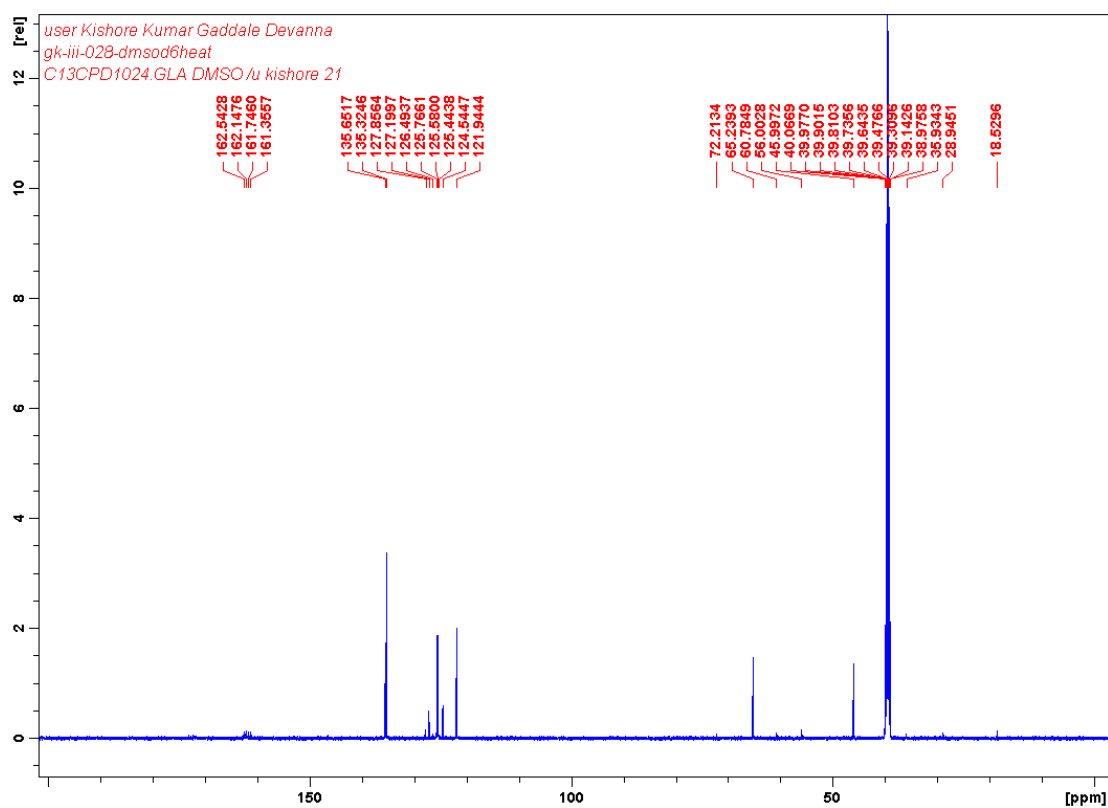


# Sodium [4-(morpholin-1'-ylsulfonyl)phenyl]triphenylborate, TPBM (sodium salt).

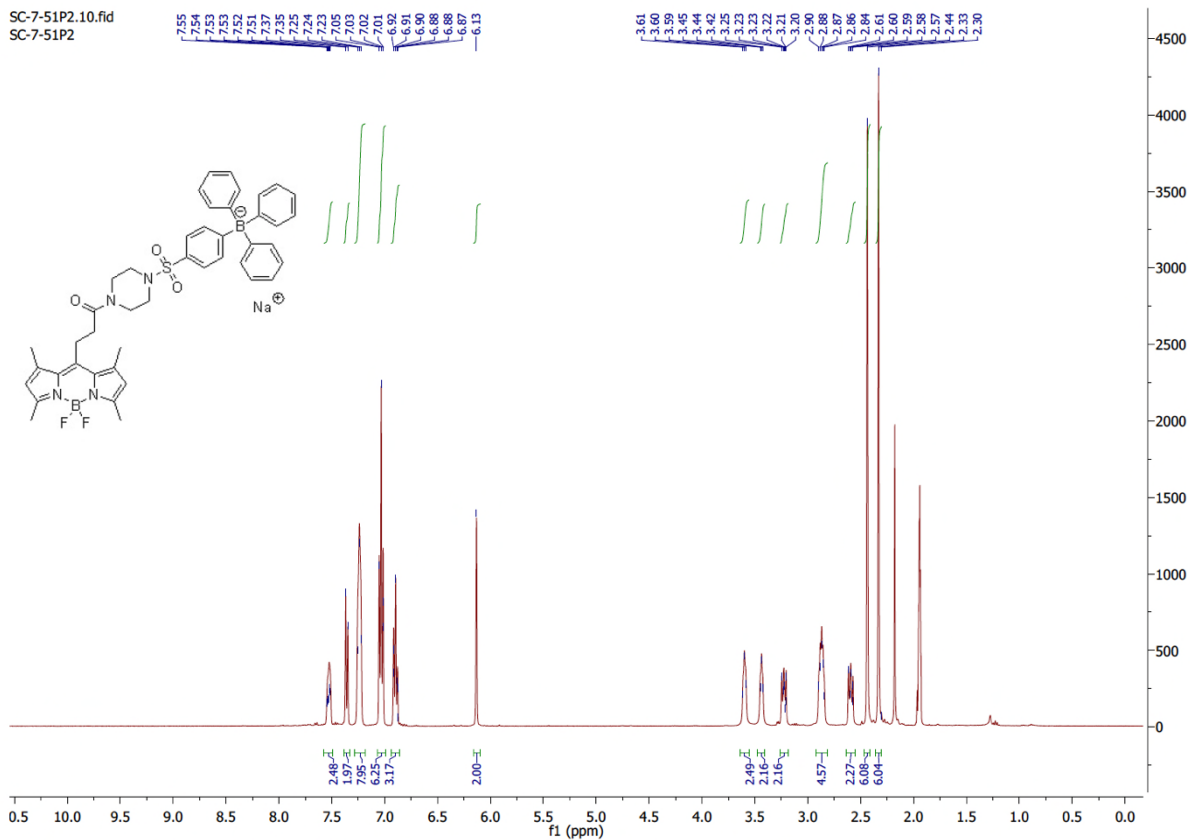
## <sup>1</sup>H NMR spectrum



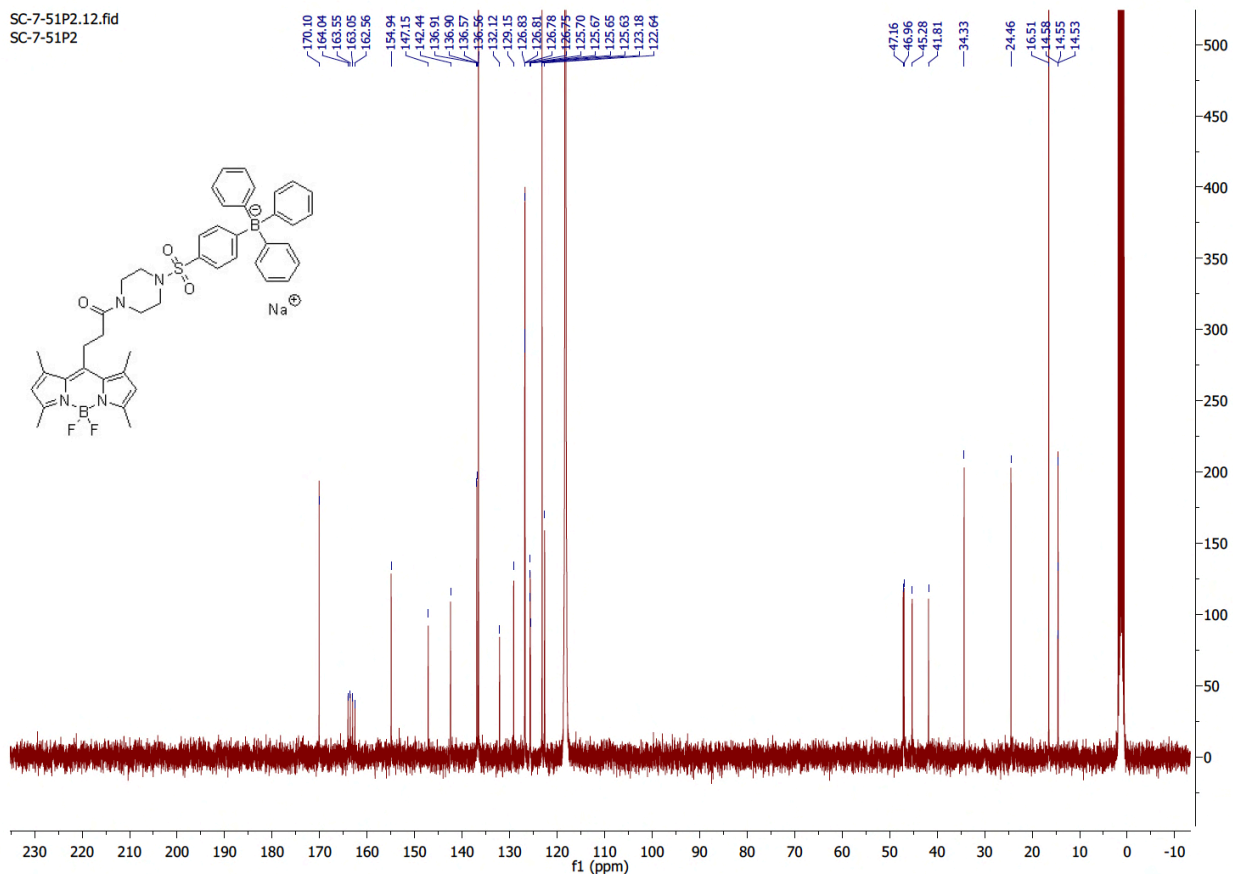
## <sup>13</sup>C NMR spectrum



**Sodium (4-{4'-[3''-(4''',4'''-Difluoro-1''',3''',5''',7'''-tetramethyl-4'''-bora-3''',a,4''')a-diaza-s-indacene-8'''-yl]propanoyl]piperazin-1'-ylsulfonyl}phenyl)triphenylborate, TPBBODIPY (sodium salt). <sup>1</sup>H NMR Spectrum**

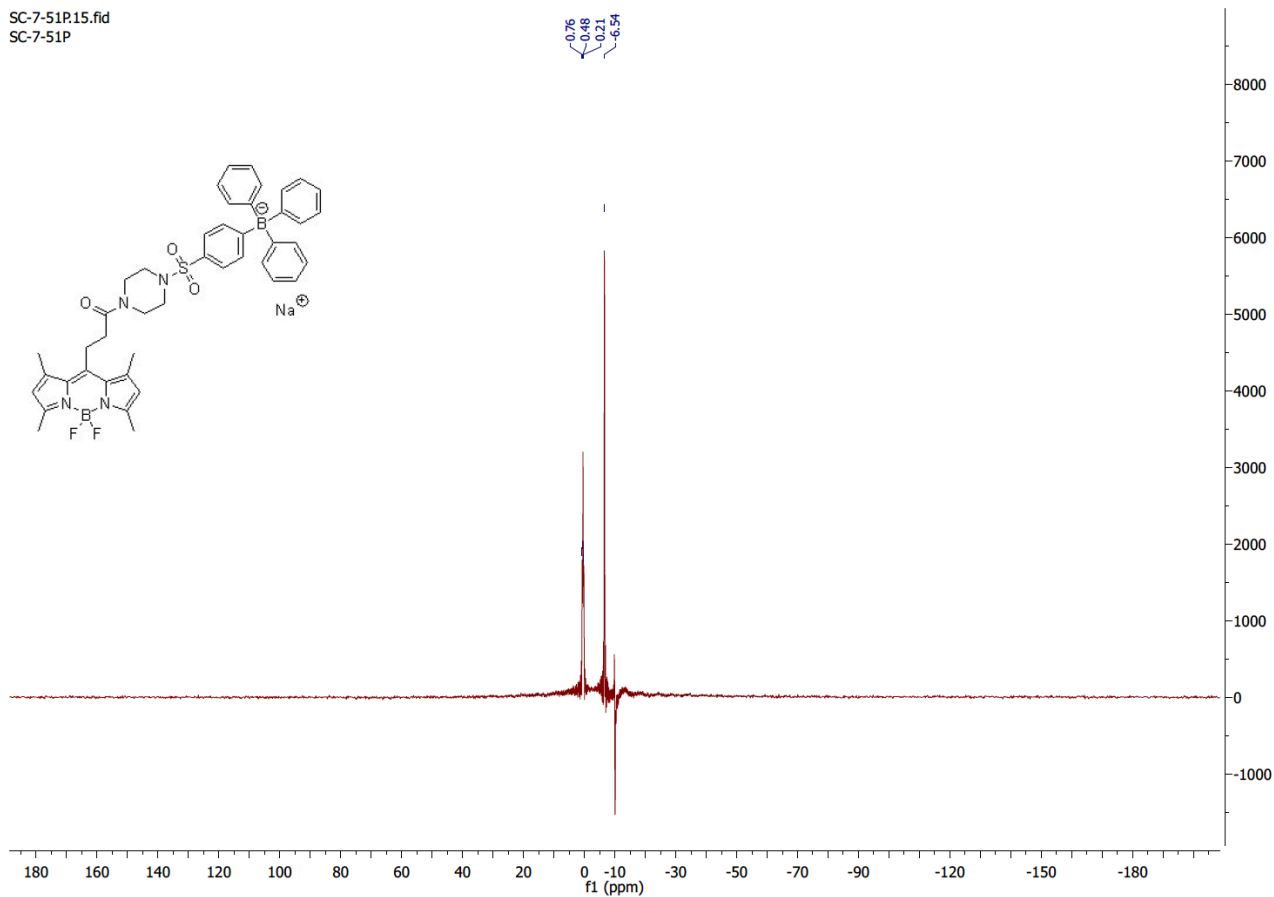


**<sup>13</sup>C NMR Spectrum**



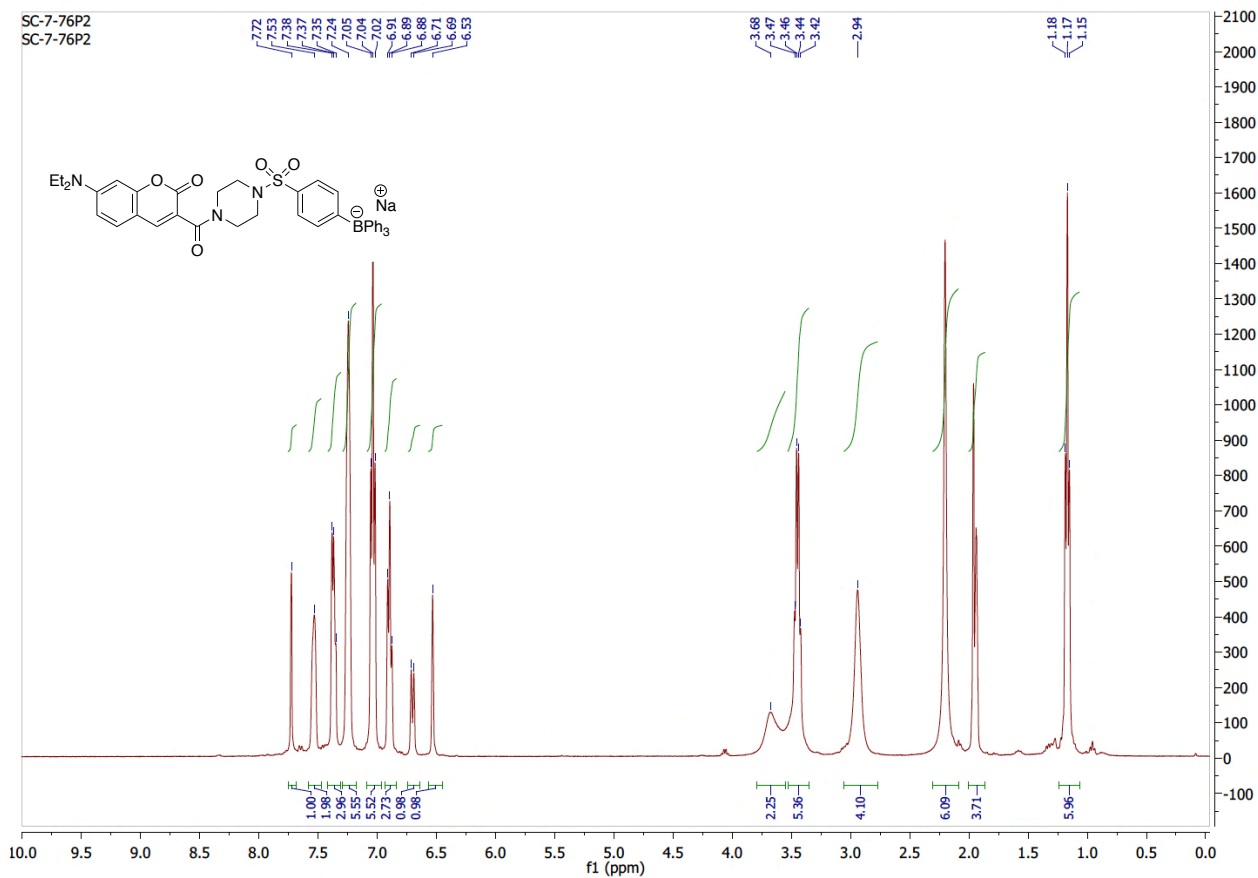
# $^{11}\text{B}$ NMR spectrum

SC-7-51P.15.fid  
SC-7-51P

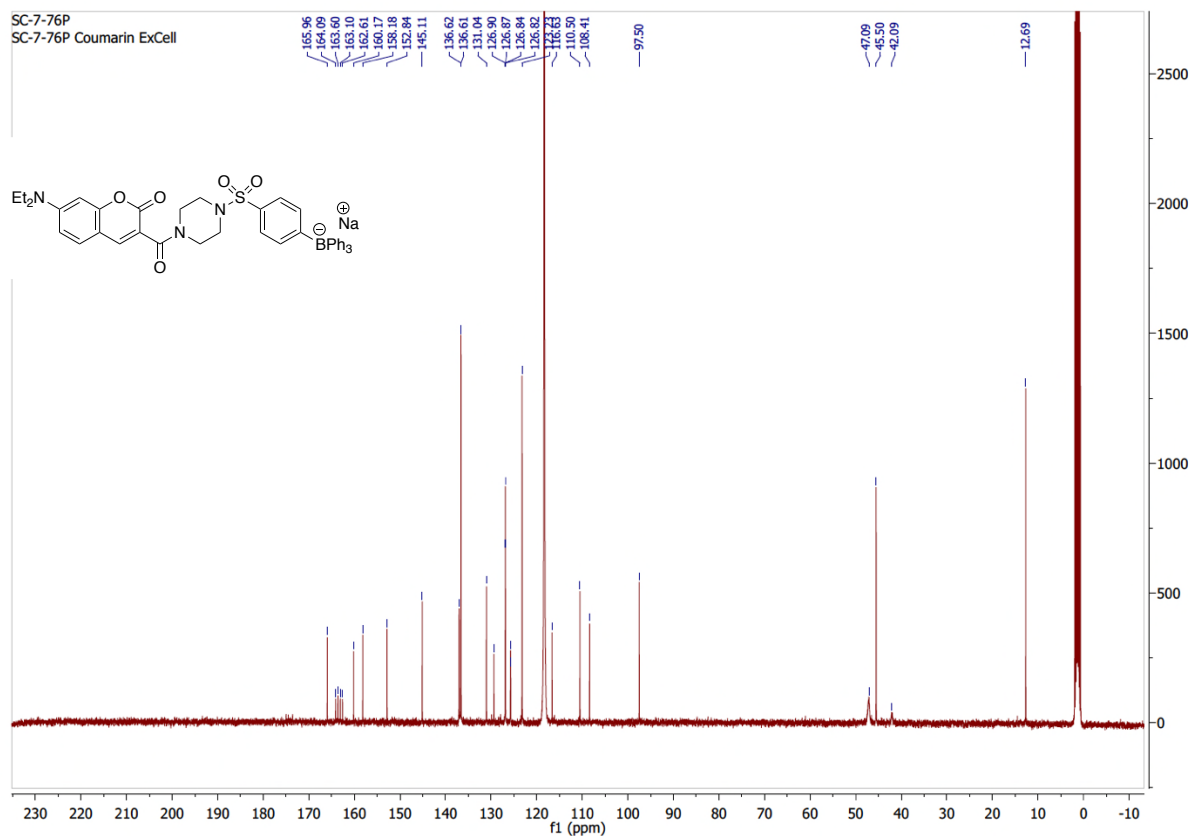




**Sodium (4-{4'-[7''-(diethylamino)coumarin-3''-carbonyl]piperazin-1'-ylsulfonyl}phenyl)triphenylborate, TPBCoumarin (sodium salt).**  
<sup>1</sup>H NMR Spectrum



<sup>13</sup>C NMR Spectrum



# $^{11}\text{B}$ NMR spectrum

